DOCUMENT RESUME

ED 333 323 CG 023 479

AUTHOR Skager, Rodney; And Others
TITLE Biennial Statewide Survey of Drug and Alcohol Use among California Students in Grades 7, 9, and 11. Winter 1989-90.
SPONS AGENCY California State Dept. of Justice, Sacramento.
PUB DATE Nov 90
CONTRACT 89-2035
NOTE 129p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Adolescents; Cultural Differences; Drinking; *Drug Use; Grade 7; Grade 9; Grade 11; Incidence; Secondary Education; Secondary School Students; Sex Differences; State Surveys; Student Attitudes; Trend Analysis
IDENTIFIERS *California

ABSTRACT

The third Attorney General's California Student Substance Use Survey was conducted between December 1989 and March 1990. A total of 6,282 students in grades 7, 9, and 11 participated. The primary focus was the extent to which declines in the use of drugs other than alcohol observed in the 1987-88 survey persisted, and whether the decline included alcohol. Also, the survey sought to determine whether any changes had occurred regarding the proportion of youth classified as high-risk users. A drop in alcohol use was registered among students in all three grade levels. This occurred despite evidence that intensive alcohol promotion in our society tends to neutralize alcohol prevention for young people. Further declines were also registered in the use of most other drugs, especially marijuana and cocaine, among older students. Finally, there were parallel drops in the percentages of students who were drunk or high. Other results provide at least tentative support for the hypothesis that adolescents who engage in high-risk drug use are a relatively resistant subgroup with respect to the antidrug messages currently being disseminated. Furthermore, alcohol use continues to prove itself more resistant to prevention efforts. In addition, there is a large group of adolescents who did not participate in the survey because they left school. Alcohol and other drug use among these youth is likely to much higher than among those remaining in school. Survey instruments and administration guidelines are appended. (LLL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED333323

Report to the Attorney General

Biennial Statewide Survey of Drug and Alcohol Use Among California Students, In Grades 7, 9, and 11

BEST COPY AVAILABLE

Winter 1989 - 90

CG023479

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Paula A. Higashi
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

2

Rodney Skager
Gregory A. Austin
Sandra L. Frith

Report to the Attorney General

Biennial Statewide Survey of Drug and Alcohol Use Among California Students In Grades 7, 9, and 11

Winter 1989-90

Rodney Skager
University of California, Los Angeles

Gregory A. Austin
Southwest Regional Laboratory

and

Sandra L. Frith
University of California, Los Angeles

The opinions, findings, and conclusions in this publication are those of the authors and not necessarily those of the California Department of Justice.

This survey and report was prepared by Southwest Regional Laboratory under Contract #89-2035 from the State of California, Department of Justice, Office of the Attorney General.

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720
(213) 598-7661

For further information or additional copies
of this report, write:

Office of the Attorney General
Crime Prevention Center
1515 K Street, Suite 100
Post Office Box 944255
Sacramento, CA 94244-2550

November 1990

Acknowledgements

We are deeply indebted to Attorney General John K. Van De Kamp for his continued concern about the use and abuse of alcohol and other drugs by California youth. This third survey represents the Attorney General's continued commitment of resources to the assessment of trends and developments in substance use among secondary school students. Over the past five years, he has taken a leading role in state efforts to reduce and eventually eliminate the demand for drugs by youth in our society.

It has been a pleasure to work with the Attorney General's staff, and in particular, Paula Higashi, who coordinated the project at the Crime Prevention Center. Ms. Higashi rendered invaluable assistance in all aspects of work, including planning, outreach to participating school districts and schools, and distribution of materials. Deep appreciation also is owed to Jack Dugan, director of the Crime Prevention Center of the Office of the Attorney General, and to Fred Register, special assistant attorney general, for their continued support and advice.

This project would not have been possible without the cooperation of school superintendents, principals, and teachers who arranged and administered the survey. Their commitment and professionalism have made this survey a reality once again.

At the Southwest Regional Laboratory, special recognition should be given to several individuals. Ann Bickel and Michael Prendergast served as school liaisons and questionnaire reviewers. Jack Pollard and Susan Ackerman assisted in the data analysis, and Diane Yoder contributed her considerable editorial expertise. Carol Thomas, director of SWRL's Human Development Program, provided invaluable advice throughout the course of the project.

To Rod Skager, we especially express our gratitude for the opportunity to work with him on this survey. Finally, we dedicate this report in memory of Anne Skager, whose tireless efforts on two previous surveys served as an inspiration to us all.

Gregory Austin
SWRL Project Director

Contents

Executive Summary 1
Specific Findings 2
Alcohol 2
Marijuana 2
Combined other drugs 2
Amphetamines 2
Cocaine/crack 2
Inhalants 2
PCP 2
Weekly use 2
Daily use 3
Eleventh-grade use 3
Ninth-grade use 3
Seventh-grade use 3
Polydrug use 3
Tobacco 3
Steroids 3
Abstinence levels 3
Use cessation 4
Initiation and lifetime use 4
Intoxication 4
High-risk use 4
Use at school 4
Driving under the influence 4
Adult awareness, use, and attitudes 4
Student attitudes 5
Information sources 5
Reasons for use/non-use 5
Drug availability 5
Prevention exposure 5
Regional differences 5
Ethnic differences 6
Gender differences 6
Conclusion 6
Introduction 7
The Questionnaire 8
Questionnaire Content 8
Questionnaire Administration 8
The Sample 9
Grade Levels Assessed 9
School Selection Criteria 9
Procedures for Obtaining Cooperation 10
Number of Schools 10
Student Sampling Procedures 11

Sample Characteristics 11
Size 11
Gender 12
Ethnicity 12
Calculation of School/Grade Weights 13
Findings 15
Use Prevalence and Frequency 15
Any use of specific substance 17
Two-year trends in average use frequency 17
Total alcohol, marijuana, and other drug use 18
Weekly use 19
Daily use 19
Five-year trends in beer and marijuana use 20
Polydrug use 22
Crack use (lifetime) 22
Cigarette use (past month) 24
Smokeless tobacco use (past month) 24
Steroid use (past year) 25
High-risk, conventional, and abstaining students 26
Use cessation 26
Lifetime abstinence 29
First Use and Intoxication 29
Age of first alcohol use 30
Age of first other drug use 30
Age of first alcohol intoxication 31
Age of first other drug intoxication 32
Avoidance of intoxication 32
First intoxicant 33
Alcohol and initiation of other drug use 34
Location of first use 34
Use Circumstances 35
Location of drug use 35
Intoxication at school by peers 36
Intoxication at school by respondents 37
Drinking and driving 38
Adult Awareness, Use, and Attitudes 39
Parental awareness of respondents' use 39
Adult use 40
Parents' attitudes about alcohol and marijuana 41
Student Attitudes and Use 42
Peer attitudes and use 42
Harmfulness of alcohol and marijuana 44
Sources of knowledge 45
Reasons for use 46
Reasons for not using 47
Availability 48
Sources of supply 48
Difficulty of obtaining alcohol 49
Sources of money 49

Prevention and Education 51
Prevention experience 51
Benefits of prevention experiences 51
Types of prevention experience (past year) 54
Regional, Ethnic, and Gender Comparisons 55
Regional Comparisons 55
Seventh-grade 56
Ninth-grade 57
Eleventh-grade 57
Ethnic Comparisons 59
Seventh-grade 60
Ninth-grade 61
Eleventh-grade 61
Gender Comparisons 64
Gender Trends, 1987-88 and 1989-90 65
Seventh-grade 66
Ninth-grade 66
Eleventh-grade 66
Ethnic Trends, 1987-88 and 1989-90 66
Asian 66
Blacks 66
Hispanics 66
Native Americans 66
Whites 66
Discussion 69
Use Trends 69
Use Influences 70
Areas of Concern 71
High-risk users 72
Minority youth 73
Alcohol use 75
Tobacco and steroid use 76
The need for early education and intervention 76
The need for more comprehensive programs 77
Use among dropouts and chronic absentees 78
The need for community-wide efforts 78
Conclusion 78
References 80

Appendices 83
Counties By Region
Administration Guidelines
Questionnaire 7
Questionnaire 9-11

Tables

1. Number of Respondents by Sex and Grade *12*
2. Number in Racial/Ethnic Groups by Grade *14*
3. Use of Each Substance at Least Once in Previous Six Months, 1985-90 *16*
4. Significant t-Tests for Mean Use of Substances for Schools, 1987-88 vs. 1989-90 18
5. Total Alcohol, Marijuana, and Other Drug Use, 1987-88 vs. 1989-90 *19*
6. Use of Six Common Substances Once a Week or More Often *20*
7. Use of Six Common Substances Daily or More Often *20*
8. Polydrug Use in Previous Six Months *23*
9. Use of Cocaine in Form of "Crack" *23*
10. Frequency of Cigarette Use *24*
11. Frequency of Smokeless Tobacco Use *25*
12. Steroid Use in Past Year, Grades 9 and 11 *25*
13. Voluntary Cessation of Alcohol Use in Grades 9 and 11 *28*
14. Voluntary Cessation of Drug Use in Grades 9 and 11 *29*
15. Alcohol Experimentation at Least Once by Age and Grade Level *30*
16. Other Drug Experimentation at Least Once by Age and Grade Level *31*
17. First Alcohol Intoxication by Age and Grade Level *32*
18. Other Drug Intoxication at Least Once by Age and Grade Level *33*
19. First "High" on Various Classes of Substances vs. "Never High," Grades 9 and 11 *33*
20. Use of Alcohol in Conjunction with First Other Drug Use *34*
21. Location of First Use of Drugs *35*
22. Perception of Where Most Kids Use Drugs, Grades 9 and 11 *36*
23. Noticing Another Student at School "High," Grades 9 and 11 *37*
24. Students "High" at School *38*
25. Frequency of Drinking While Driving *38*
26. Perception of Parent Knowledge of Drug/Alcohol Use *39*
27. Knowing Adults Who Use Alcohol, Marijuana, Cocaine or Pills, Grades 9 and 11 *41*
28. Perceptions of Parents' Attitudes About Student Use of Alcohol vs. Marijuana *42*
29. Perception of Best Friends' Reaction to Use Vignettes, Grades 9 and 11 *43*
30. Perceptions of Best Friends Use of Alcohol vs. Marijuana, Grade 7 *44*
31. Ratings of Harmfulness of Frequent Alcohol vs. Marijuana Use *44*
32. Sources of Knowledge About Drugs/Alcohol *45*
33. Reasons Most Kids Use Alcohol or Other Drugs, Grades 9 and 11 *47*
34. Percentage Giving Reasons for Not Using Alcohol or Other Drugs *48*
35. Perception of Where Most Drug Users at Schools Get Drugs *49*
36. Difficulty in Obtaining Alcohol at Students' Grade Level *50*
37. Users' Source of Money to Purchase Drugs/Alcohol *50*
38. Effects of Drug/Alcohol Education in Grades 9 and 11 *52*
39. Effects of Drug/Alcohol Education in Grade 7 *53*
40. Prevention Involvement in Grades 9 and 11 *54*
41. Tukey HSD Comparisons Between Regions for 7th-Grade Students *56*
42. Tukey HSD Comparisons between Regions for 9th-Grade Students *58*
43. Tukey HSD Comparisons between Regions for 11th-Grade Students *59*
44. Tukey HSD Comparisons Between Racial/Ethnic Groups for 7th-Grade Students *60*

45. Tukey HSD Comparisons Between Racial/Ethnic Groups for 9th-Grade Students *62*
46. Tukey HSD Comparisons between Racial/Ethnic Groups for 11th-Grade Students *63*
47. Difference Comparisons Between Males and Females *64*
48. Comparisons Between Males and Females for Schools, 1987-88 vs. 1989-90 *65*
49. Comparisons Between Racial/Ethnic Groups, 1987-88 vs. 1989-90 *67*

Figures

Total Percentage Using Beer in Previous Six Months, 1985-90 *21*
Total Percentage Using Marijuana in Previous Six Months, 1985-90 *21*
Total Percentage Using Marijuana Daily, 1985-90 *22*
Comparison of HRU, CON, and ABS Students in Grade 9, 1987-88 vs. 1989-90 *27*
Comparison of HRU, CON, and ABS Students in Grade 11, 1987-88 vs. 1989-90 *27*

Executive Summary

The third Attorney General's California Student Substance Use Survey was conducted between December 1989 and March 1990. The sample of 44 senior high and 43 intermediate schools, almost all of which participated in the two previous surveys in 1985-86 and 1987-88, is representative of public schools in the state with respect to geographical region, school enrollment, ethnicity, and socioeconomic status. A total of 6,282 students in 7th-, 9th-, and 11th-grades participated.

Students completed the questionnaire under conditions of strict anonymity. The questionnaire asked how often students used 21 forms of alcohol or other psychoactive drugs in the previous six months, as well as age of first use and first intoxication. It also assessed experiences and values relevant to substance use, including students' perceptions of peer and parental attitudes and expectations. Other questions asked about sources and availability of alcohol and other drugs, whether parents were aware of the students' use (if any), and the effects of alcohol and drug education programs.

This third survey's primary focus was the extent to which declines in the use of drugs other than alcohol observed in the 1987-88 survey persisted and whether the decline included alcohol. Second, we sought to determine whether any changes had occurred in regard to the proportion of youth classified as high-risk users. Third, in order for the survey to be more useful to the increasing number of prevention practitioners in the state, in the last section of this report we have expanded the analysis of the implications of the findings in the context of current prevention and intervention efforts (see Section VI, Discussion).

Overall, the 1989-90 substance use survey results were encouraging. A drop in alcohol use was registered among students in all three grade levels. This occurred in the face of mounting evidence that intensive alcohol promotion in our society tends to neutralize alcohol prevention for young people. Likewise, further declines were registered in the use of the most popular other drugs--especially marijuana and cocaine--among older students. Finally, there were parallel drops in the percentages of students who were drunk or high.

Although encouraging, the findings provide no indication that alcohol and other drug use among California's adolescents is in rapid decline. In particular, the persistence of relatively large subgroups of high-risk users in Grades 9 and 11 and high levels of alcohol consumption remains a problem to be addressed.

Specific Findings

When drugs were combined into the three categories of alcohol, marijuana, and all other drugs, any use over the past six months declined compared to 1987-88 in all grade levels for all categories, although not all the declines were significant. (See Table 5.)

Alcohol. Fifty percent of 7th-, 62% of 9th-, and 75% of 11th-grade students reported using some form of alcohol at least once in the previous six months. These percentages were significantly lower than those for the 1987-88 survey. (See Table 5.) Beer was used more frequently by adolescents than any other psychoactive substance. However, a statistically significant decline in the average frequency of beer drinking among students in Grades 9 and 11 occurred since 1987-88. For the total sample, the decline was from 58% to 49% among 9th-graders and from 68% to 62% among 11th-graders. A statistically significant decline in average frequency of consumption of spirits was also found at Grade 11 (46% from 52% in 1987-88). (See Tables 3-4 and Figure 1.) In addition, weekly beer drinking declined among 11th-graders. (See Table 6.)

Marijuana. Any use of marijuana (including hashish) in the past six months was reported by 7% of 7th-, 20% of 9th-, and 28% of 11th-grade students. There was a statistically significant drop in use of marijuana/hashish only at Grade 11 (from 33% to 28%). (See Tables 3-5.) Among 11th-graders, there were also declines in weekly use (from 9% to 7%) and daily use (from 4% to 3%). (See Tables 6-7 and Figures 2-3.)

Combined other drugs. Combined use in the past six months of all other drugs except alcohol and marijuana (e.g., cocaine, LSD, PCP, inhalants, etc.) was reported by 17% of 7th-, 19% of 9th-, and 23% of 11th-grade students. Again, the use decline was statistically significant only for students in Grade 11. (See Table 5.)

Amphetamines. A significant decline in amphetamine use in the past six months occurred among 11th-graders (from 11% to 8%). (See Tables 3-4.)

Cocaine/crack. A significant decline in cocaine use in the past six months occurred among 11th-graders (from 11% to 7%). (See Tables 3-4.) Any use of "crack" cocaine (lifetime) remained at the same levels observed in the 1987-88 survey among 7th- and 9th-grade students (2% and 5%, respectively). Among 11th-graders, crack use declined from 9% to 7%. Most students who used crack did so only once or twice. (See Table 9.)

Inhalants. Inhalant use declined among 9th-graders from 13% to 11%. (See Tables 3-4.)

PCP. The only significant increase for any substance at any grade level occurred for PCP use among 9th-graders (from 2.6% in 1987-88 to 4%). (See Tables 3-4.)

Weekly use. Among 11th-graders, frequent use (weekly or more often) of beer declined from 20% in 1987-88 to 16%, and weekly marijuana use dropped slightly (from 8% to 7%).

Ninth-grade rates for both substances remained about the same. Among 7th-graders, weekly or more frequent use of even these commonly used substances was always close to nil. (See Table 6.)

Daily use. Among 11th-graders, very frequent use (daily or more often) of marijuana declined (from 4.3% in 1987-88 to 3.4% currently). Although this decline was not statistically significant, it is still a major improvement from the 7.4% reported in 1985-86. (See Table 7 and Figure 3.)

Eleventh-grade use. In general, the most significant declines in any use of all categories of drugs over the past six months (especially the most popular) occurred among 11th-graders (e.g., beer, spirits, marijuana, cocaine, and amphetamines). Eleventh-graders also reported declines in weekly use of beer and marijuana, daily use of marijuana, and history of intoxication. (See Tables 3-7.)

Ninth-grade use. Among 9th-graders, significant declines occurred in the use of beer and inhalants and in substances used by relatively few students (barbiturates, tranquilizers, and "other" narcotics). On the other hand, PCP use registered the only significant increase for any substance at any grade level. With the exception of inhalants, use rates for all of the above substances fell well below 10%. (See Tables 3-7.)

Seventh-grade use. Among 7th-grade students, there were no statistically significant changes in average use of any substance. The very low levels of the use of drugs other than alcohol or inhalants reported by 7th-graders in 1987-88 rendered large changes unlikely. (See Tables 3-7.)

Polydrug use. There was very little change since the previous survey in concurrent levels of multiple substance (polydrug) use at Grades 7 and 9. There appears to have been a moderate decline at Grade 11 (31% reporting in 1987-88 compared to 27% currently). (See Table 8.)

Tobacco. Cigarette smoking changed little since the previous survey, especially among those reporting smoking at least once a day. However, among 11th-graders, 76% still never smoked, compared with 73% in the 1987-88 survey. Those who reported smoking only a few times also declined 3%. This suggests prevention efforts may have been more successful than intervention efforts. (See Tables 10-11.)

Steroids. Steroid use changed little and remained at a level of 3% among 9th- and 11th-graders for any use in the past six months. (See Table 12.)

Abstinence levels. The proportion of students abstaining from any use of alcohol or other drugs over the past six months increased from 28% in 1987-88 to 34% among 9th-graders, and from 19% to 23% among 11th-graders. (See Figures 4-5.) Lifetime abstinence was

reported by 44% of 9th- and 30% of 11th-graders for alcohol, and 79% and 66%, respectively, for other drugs. (See Tables 13-14.)

Use cessation. Whereas few student drinkers quit using alcohol, a considerable proportion of other drug experimenters reported having stopped using. (See Tables 13-14.)

Initiation and lifetime use. Slight declines in any use of alcohol or other drugs were reported at each grade level. Among 7th-graders, 51% indicated that they tried alcohol by age 12, a decline from 54% reported in 1987-88. For other drugs, the reported level was 8%, compared with 9% in 1987-88. Among 11th-graders, 83% reported some alcohol use and 42% some other drug use, compared with 81% and 35%, respectively in 1987-88. (See Tables 15-16.)

Intoxication. For all three grades and all drug categories, the percentages of students who were ever intoxicated declined. This was most noticeable at Grade 11 (from 62% to 55% for alcohol; from 36% to 31% for other drugs; and from 66% to 59% for any drug including alcohol). Despite this decline, high rates of alcohol intoxication at young ages still were reported, with almost one-third of 9th-graders reporting being drunk at least once. Alcohol remained the drug by which the majority of students first experienced intoxication (one-third of 9th-graders and about one-half of 11th-graders), followed by marijuana (7% and 9% respectively). (See Tables 17-19.) Alcohol use also often occurred in conjunction with the first use of other drugs. (See Table 20.)

High-risk use. Some students in Grades 9 and 11 were classified as "high-risk." This was defined as having a pattern of use indicative of serious involvement with drugs coupled with a history of engaging in practices widely viewed as risky or dangerous. For the current survey, the proportion of high-risk users in Grade 9 remained unchanged at 14%. Among 11th-graders, the percentage declined slightly (from 23% to 21%). (See Figures 3-4.) Addressing the needs of these high-risk users is a major challenge for the public agenda.

Use at school. Students were most likely to use alcohol or other drugs outside of school at social events or with friends. (See Table 22.) Nevertheless, one in five 9th-graders and one in four 11th-graders were aware that another student in the classroom was high on drugs or alcohol once a week or more often. (See Table 23.) Among respondents, 14% of 9th-graders and 22% of 11th-graders reported being high at school at least once and 3% and 7%, respectively, reported being high more than six times. (See Table 24.)

Driving under the influence. Twenty-three percent of 7th- and 9th-graders and 35% of 11th-graders were in a car when they (or someone else) were driving under the influence. Fourteen percent of 11th-graders did so three or more times. (See Table 25.)

Adult awareness, use, and attitudes. Among alcohol drinkers, slightly under a quarter of 7th- and 9th-graders and one-third of 11th-grade users reported that their parents were aware of

their drinking. Users of other drugs believed their parents were far less aware of their use. (See Table 26.) About one-half of 9th-graders and slightly over one-half of 11th-graders reported that many or all adults they knew used alcohol. (See Table 27.) At all three grade levels, far more students perceived their parents to be more strongly opposed to marijuana than to alcohol. (See Table 28.)

Student attitudes. The percentage of students who reported that best friends would avoid a student high on alcohol or other drugs declined between 9th- and 11th-grade. (See Table 29.) Among 7th-graders, one disconcerting finding was that the percentage of those who thought their best friends would never use marijuana declined from 51% to 44%. (See Table 30.) The percentage at each grade reporting that frequent use of alcohol or marijuana was extremely harmful increased, especially among 11th-graders. Regular use of marijuana was viewed as more harmful than alcohol. (See Table 31.)

Information sources. At each grade level surveyed, the most frequently cited source of information about alcohol and drugs was "classes in school." This represents a significant change since the 1985-86 survey when "friends" were cited most often by older students. (See Table 32.)

Reasons for use/non-use. There was a drop in the percentage of 9th- and 11th-graders citing peer pressure as a reason for use, suggesting a decline in its influence. (See Table 33.) The most popular reason for not using a drug was becoming an alcoholic or addict. (See Table 34.)

Drug availability. Friends and parties outside of school remained the most frequently named sources of alcohol and other drugs among students. One-third of 9th-graders and one-half of 11th-graders reported that it was "[redacted]y easy" to obtain alcohol in their communities. Among 11th-graders, 73% reported their money for drugs came from parents or jobs. Only 9% of 11th-graders reported drug dealing as the source, compared with 15% of 9th-graders. (See Tables 35-37.)

Prevention exposure. Among 9th-grade students, the most frequently reported contact (31%) with drug and alcohol prevention in school during the previous year was one-time events such as assemblies. Eleventh-grade students had most frequent contact (38%) with AOD courses lasting less than a semester. When asked what they learned from school prevention activities, a majority of 9th- and 11th-graders (60% in both grade levels) said "alcohol/drugs are harmful." (See Tables 38-40.)

Regional differences. In comparisons among the six state regions, students in the Northern region most consistently reported significantly more use of alcohol and other drugs than did students in other regions. Students in the Central region most consistently reported

BEST COPY AVAILABLE

significantly less use in such comparisons. No significant urban-rural differences were evident. (See Tables 41-43.)

Ethnic differences. In comparisons among ethnic groups, there was a relatively consistent ordering of frequency of substance use that indicated relatively high use among Native Americans, whites, and Hispanics, and relatively low use among Asians, with blacks falling in the mid-range. (See Tables 44, 45, 46, and 49.)

Gender differences. Comparisons between male and female students revealed that males at one or more grade levels reported more frequent use of all substances except wine. Eleventh-grade females drank more wine than did their male classmates. Declines in use since 1987 appear to have been due primarily to changes in use among girls for 9th-graders and among boys for 11th-graders. (See Tables 47-48.)

Conclusion

The implications of these and other findings as they relate to use prevention and reduction in California, as well as future research needs, are discussed in the final section of this report. Among the issues addressed are the need to: (a) examine more thoroughly the factors that influence use cessation; (b) pay more attention to the needs of high-risk or heavy users; (c) target research and prevention efforts toward minority youth; (d) expand control, prevention, and intervention efforts directed at alcohol use; and (e) in general, undertake more intensive, ongoing prevention efforts at all grade levels, but especially in elementary schools.

The results provide at least tentative support for the hypothesis that adolescents who engage in high-risk drug use are a relatively resistant subgroup with respect to the antidrug messages currently being disseminated. While total drug use among California adolescents may be in decline, a resistant subgroup remains, for which alternative tactics--including early intervention--should be considered. Furthermore, alcohol use continues to prove itself more resistant to prevention efforts.

In addition, while overall use is declining within the student population, there is a large group of adolescents who did not participate in the survey because they left school. Alcohol and other drug use among these youth is likely to be much higher than among those remaining in school.

I. Introduction

The third biennial survey of alcohol and other drug (AOD) use among 7th-, 9th-, and 11th-grade students enrolled in 87 public secondary schools throughout California was administered to a representative sample of 6,282 youths between December 1989 and March 1990. The majority of questions on the survey were identical to those asked in 1985-86 and 1987-88, and most of the schools that participated this year also participated in both prior years.[1]

Sponsored by the Attorney General of California, the *California Student Substance Use Survey* is designed to monitor and provide information on AOD use and related attitudes and experiences among the state's public secondary school students. The information reported from the 1985-86 and 1987-88 surveys has been used throughout California to heighten public awareness of the AOD problems among youth and to establish a basis for allocating resources for prevention and intervention programs. A report describing high-risk substance users in the 1987-88 senior high school sample provided part of the basis for recent prevention policy recommendations to the California Legislature made by the Legislative Analyst's Office.[2]

The third administration of the survey enabled the monitoring of use over the five years since the first administration in the winter of 1985-86. This made it possible to discern long-term trends in AOD use among public secondary school students as a whole as well as among important subpopulations, especially students in high-risk groups. Of special interest in this third survey was whether or not use declines observed in the 1987-88 survey persisted. The results indicated that while progress continued, there is no reason for complacency. Use remained at unacceptably high levels, and the progress made within the general student population was not being made among the heaviest users and the most at-risk of developing drug-related problems.

In this report, Sections II and III provide overviews to the survey content and to the sampling procedures. Section IV presents findings on a grade-level basis and Section V presents the results of comparative analyses of the prevalence data according to regional, ethnic, and gender variations. A concluding discussion reviews some of the implications of the findings. Copies of the questionnaire and administration guidelines are in the appendixes.

---

[1]The results of the previous two surveys were published as in Skager, Fisher, and Maddahian (1986) and Skager, Frith, and Maddahian (1989).

[2]See Skager and Frith (1989) and California Office of the Legislative Analyst (1990).

II. The Questionnaire

As done in previous surveys, the 1989-90 survey used separate questionnaires for the upper grades (9 and 11) and the lower grade (7). (See Appendix III for copies.)

Questionnaire Content

The two questionnaires assessed the same basic information on the use of specific substances or combinations of substances. The 7th-grade version was shorter (44 questions instead of 75) and simplified in its assessment of attitudes and experiences and was less demanding of reading comprehension skills. In a few cases (e.g., questions about steroid use) questions were dropped from the 7th-grade version.

The current versions evolved from questionnaires used over the last decade in local surveys conducted throughout California. Many of the questions assessing the use of specific substances were taken from a questionnaire developed for the National Institute on Drug Abuse and used in longitudinal investigations of adolescent drug use by the University of California, Los Angeles (UCLA) Center for the Study of Drug Abuse Etiologies. Additional questions were developed to assess a variety of attitudes, experiences, and behaviors potentially related to the use of psychoactive substances.

Virtually every version of the Attorney General's questionnaire included new or modified questions. However, this year's instrument was very similar to prior versions. New questions dealt with (a) parental awareness of student use; (b) sources of money used to buy alcohol or other drugs; (c) use cessation; (d) drinking at the time of first illicit drug use; and (e) type of student involvement in school prevention education. As in the 1987-88 survey, a set of questions assessing at-risk behavior history also was included.

Questionnaire Administration

Principals from participating schools were advised to administer the questionnaire in an assembly room other than a regular classroom and to seat the students so that they could not observe each other's responses. Proctors were present, but remained at a distance where they could not observe students' responses. It was strongly recommended that the principal or other authority begin the survey administration by stressing the importance of the survey and its voluntary and anonymous nature. Finally, supervisors were advised to have students place their completed questionnaires in a box instead of handing them to an adult or another student.

III. The Sample

The sampling plan for the survey was the same as that used for the previous surveys. This information is summarized below along with characteristics of the current sample. The instructions given to schools on selecting the sample are in Appendix II.

Grade Levels Assessed

The survey was administered at Grades 7, 9, and 11. In most school districts, Grade 7 marks the beginning of secondary school (junior high or middle school) although in a few school districts Grade 7 was located in elementary schools. AOD use generally is initiated after Grade 7 (age 12) by relatively large numbers of young people (i.e., it is normally initiated in Grade 8 [age 13] or later). Thus, Grade 7 provides a baseline measure during what is, for most students, the last of the preteen years.

For the majority of California's public school students, Grade 9 is the first year of senior high school. In previous surveys, 9th-grade rates of AOD use typically registered about two-thirds of use rates in Grade 11. This survey assessed students at Grade 11 rather than Grade 12 (the last year of high school) because school superintendents and principals prefer to obtain information on older high school students well before the last year of secondary school. Moreover, previous survey findings, as well as other surveys throughout the country, confirm that virtually all of the students who initiate alcohol or other drug use do so by the time they are in Grade 11 (age 16).

School Selection Criteria

The sampling procedure began with the selection of the senior high schools and then appropriate feeder schools. Senior high schools were selected based on four sampling characteristics or stratification variables: (a) region of the state; (b) senior class enrollment; (c) percentage limited/non English proficient students (percentage LEP/NEP); and (d) parental socioeconomic status. The state was divided into six regions: the San Francisco area, Los Angeles County, San Diego County, a northern region, a central region, and an inland/southern region. (The counties classified under each of the four regions incorporating more than one county are listed in Appendix I.)

Stratification variables (2) - (4) were dichotomized at their respective medians within regions. This process created 48 sampling cells (8 categories per region times 6 regions) of which 10 were empty and 8 others virtually empty. ("Empty" refers to coordinations of the

sampling variable for which no schools were found, e.g., Los Angeles region, low enrollment, high percentage LEP/NEP, high SES). Schools in the remaining 30 cells were randomly sampled proportionally to the number in each cell, but with the intended maximum number of participating high schools fixed at 50. (Additional schools were sampled from the same cells at this time to serve as replacements for any of the original schools unable to participate.) Very small schools enrolling less than 25 students (of which there were 48 in 1985) were excluded. Of the 50 high schools initially selected, 45 ultimately completed the 1985-86 survey. Thirty-eight of the latter were among the 44 senior high schools who participated in the current survey.

Since statewide data comparable to those used to stratify the high school sample were not available for elementary, middle, and junior high schools, an alternative sampling plan was developed. Participating school districts were asked to name a "feeder" intermediate school sending all, or nearly all, of its graduating students to each of the high schools selected for the sample. The intermediate school sample was thus linked directly to the senior high school sample. Of 39 such schools that participated in the 1985-86 survey, 34 participated in the current survey. Seven replacement schools were added to the current sample, for a total of 43 intermediate or elementary schools.

Procedures for Obtaining Cooperation

School district superintendents received a letter from Attorney General John K. Van de Kamp summarizing the nature and importance of the survey and requesting cooperation. Once district cooperation was obtained, letters were sent to the principals of selected schools to confirm participation. Included with the letter were instructions for conducting the survey and a sample permission letter to be sent to parents explaining the survey and how their children were selected.[3] Regular contact with principals and other staff at participating schools was maintained throughout the period during which data were collected.

Number of Schools

All schools who previously participated in the Attorney General's survey were asked to participate again. This year 43 intermediate schools and 44 high schools participated in the survey. Of these, 36 and 38, respectively, were in the 1985-86 survey. Six additional

[3]For copies of these materials see Skager, Fisher, and Maddahian (1986) and Skager, Frith, Maddahian (1989).

continuation high schools also participated. The results from these schools were not analyzed here.

Of the senior high schools originally selected in the 1989-90 sample, 11 were unable to participate for a variety of reasons. Five of these schools were replaced with alternative schools selected from the same sampling cells. The loss without replacement of six senior high schools does not appear to have distorted the sample in any systematic way. Only one empty sampling cell occurred in the senior high sample, and that for a single school unit in the Central region. (The intermediate school in this cell did participate.) However, in one of the six cells in the Los Angeles region only two of the five senior high schools participated. This particular cell contained schools with high enrollment, low percentage of limited/non English proficient students, and low socioeconomic status. Four of the five junior high schools (containing both Grades 7 and 9) in this cell did participate, so whatever distortion occurred was confined to Grade 11.

Student Sampling Procedures

Schools were provided with detailed instructions on drawing a 15% random sample of English-speaking students at each grade level to be assessed. Details of this and other procedures for administration and return of the questionnaires were sent to school principals. For very small schools, a minimum of 25 students was set even when this number exceeded 15% of the grade level. Project personnel maintained telephone contact with all principals and (where appropriate) district or school staff assigned to supervise the assessment. These procedures are described more fully in Appendix II and in the previous survey reports.[4]

Sample Characteristics

Tables 1 and 2 provide a summary of the characteristics of the final sample compared with that of the 1985-86 baseline survey.

Size. As evident in Table 1, the final sample was smaller at each grade level than the baseline sample, as would be expected because of attrition of schools. A total of 6,776 questionnaires were received, but 492 (7%) were eliminated because of partial completion, various inconsistencies, improbable response patterns, and administration to students in the

[4]See Skager, Fisher, and Maddahian (1986) and Skager, Frith, and Maddahian (1989).

wrong grade levels. The final sample of respondents consisted of 6,282 with subtotals of 1,787, 2,191 , and 2,304 students in Grades 7, 9, and 11, respectively.

Eliminating questionnaires on the basis of improbably high substance use patterns for a given grade level obviously involved judgment. The effect on the overall results of the survey was in the direction of *lower* estimates of substance use. In other words, conservative as opposed to possibly inflated results were sought.

Gender. Table 1 summarizes the 1985-86 and 1989-90 respondents by grade and gender. The percentages of male and female respondents are close to even at each grade level as well as similar in both surveys.

Table 1
Number of Respondents by Sex and Grade

	Grade 7			Grade 9			Grade 11		
	M	F	T	M	F	T	M	F	T
1985-86									
n	1,052	1,014	2,087	1,240	1,269	2,553	1,350	1,378	2,759
%	50.9	49.1		49.4	50.6		49.5	50.5	
1989-90									
n	886	856	1,787	1,053	1,108	2,191	1,186	1,093	2,304
%	50.9	49.1		48.7	51.2		52.0	48.0	

Note. M = male. F = female. T = total.

Ethnicity. In the past, students reported their race and/or ethnicity by checking one of the following categories: Asian, black, Latino/Mexican/Hispanic, American Indian, white/Anglo, and "other." In the current questionnaire, following new state and federal guidelines (see AB 814, chapter 965, 1989) calling for more detailed breakdown of racial and ethnic status, 15 such categories were provided. This was done primarily by increased differentiation within the categories of "Asian" (7 subcategories) and "Hispanic" (5 subcategories).

The use of the expanded ethnic categories unfortunately rendered the current information not comparable with that collected for the two previous surveys in which only six categories (Asian, black, Hispanic, American Indian, white, and other) were used. The expansion in the number of response categories produced significant numbers of multiple checks (12%, 7%, and 5% at Grades 7, 9, and 11 respectively), a problem that rarely occurred with the previous,

more inclusive categories. Moreover, considerably fewer students checked "white" at Grades 9 and 11, a result that was predicted on the basis of the pattern of school attrition described earlier. While statewide demographic changes continue to decrease the proportion of white students statewide, it is also likely that some students who might have placed themselves in this group on the previous scale did not do so on the current, more differentiated scale.

In Table 2, the ethnic composition of the sample was provided in categories combined to reflect the simpler classification system used in the previous surveys. The Hispanic category combined Mexican American, Central American, Cuban, Puerto Rican, and other Hispanic. The Asian category combined Chinese, Korean, Southeast Asian, and Japanese. The "other" category combined Filipino, Asian Indian, Pacific Islander, and respondents who checked multiple categories.

The current sample differed from the baseline sample only to a moderate degree (between 2 and 5%) for Asians at Grade 7, blacks at Grade 9, and other at Grade 7. There were other more noteworthy differences. Compared to the baseline sample, there were relatively more Hispanic students in Grades 9 and 11 (especially in the former). The largest differences occurred for white students in Grades 9 and 11, in both cases registering a drop of about 10% from 1985-86 to 1989-90. Finally, there were sharp increases in the percentages of students classified as other in Grades 9 and 11. These changes undoubtedly reflect real demographic changes (such as the decline in the proportion of white students), but also reflect whatever changes resulted from the expansion in the number of racial and ethnic categories on the current questionnaire. Unfortunately, it is impossible to sort out the relative effects of each of these influences.

Calculation of School/Grade Weights

The current data were weighted at the school level in the same fashion as was done in the previous surveys. The purpose of the procedure was to assign to each school/grade a weight proportional to the enrollment of the school. The procedure involved adjusting frequencies at each grade level within each school for over and undersampling. Specifically, the weighting took into account: (a) size of the total obtained sample at each grade level; (b) estimated enrollment in each assessed grade level for each school; and (c) obtained versus intended number of cases at each school/grade level. The procedure is described in more detail in the 1985-86 report.

Table 2
Number in Racial/Ethnic Groups by Grade

	Grade 7		Grade 9		Grade 11	
	1985-86	1989-90	1985-86	1989-90	1985-86	1989-90
Asian						
n	183	100	218	194	290	237
%	8.9	6.3	8.7	9.6	10.5	10.8
Black						
n	197	164	245	103	322	166
%	9.5	10.3	9.7	4.7	11.7	7.6
Hispanic						
n	518	481	607	698	545	562
%	25.1	30.1	24.2	34.5	19.8	25.7
Native American						
n	84	73	75	80	65	65
%	4.1	4.6	3.0	4.0	2.4	3.0
White						
n	811	671	1161	773	1375	975
%	39.2	37.5	46.2	38.2	50.0	44.5
Other						
n	274	109	207	174	154	185
%	13.3	6.8	8.2	18.6	5.6	8.4

Note. Because the number of ethnic and racial categories was expanded for this survey, the combined results in Table 2 are not readily comparable to those for the previous surveys (see explanation in text). The categories in Table 2 that reflect combined categories are: *Hispanic*, combining Mexican, Central American, Other Hispanic, Cuban, and Puerto Rican; *Asian*, combining Chinese, Korean, Southeast Asian, and Japanese; and *other*, combining Filipino, Asian Indian, Pacific Islander, and respondents who checked multiple categories.

IV. Findings

This section summarizes the major findings of the 1989-90 survey and compares them with those of the 1987-88 survey. Where appropriate, comparisons also are made to 1985-86 findings. References to individual items in the upper-grade questionnaire (Appendix III) are provided in italics. The results were organized under the following categories: (a) use prevalence and frequency, including a comparison of high-risk, conventional, and abstaining students; (b) circumstances surrounding first use and intoxication; (c) situations in which use occurs; (d) adult knowledge, attitudes, and use; (e) student attitudes toward use and sources of knowledge; (e) availability of alcohol and other drugs; and (f) prevention and education experience.

Use Prevalence and Frequency

In this section we report on the major findings regarding prevalence and use frequency, comparing the results with those from the 1987-88 survey and, where appropriate, the baseline 1985-86 survey. Five-year trends are provided for beer and marijuana use (see Figures 1 and 2). All results are reported as percentages except for significant *t*-tests for mean use of specific substances between 1987-88 and 1989-90. Unless otherwise specified, the findings refer to reported use in the past six months.

In the main series of questions regarding prevalence and use frequency (*Items 1-17*), students were asked to indicate how often in the past six months they used each of 17 substances or classes of substances without a doctor's prescription. Responses were on the following scale: *never* (1), *once or twice* (2), *a few times* (3), *once a month* (4), *once a week* (5), *once a day* (6), and *more than once a day* (7). Table 3 provides specific percentages for each of these substances at least once across all three administrations of the survey by grade level.

Table 4 provides the results of *t*-tests for differences in mean frequency of total use over the past six months by grade level between the 1987-88 and 1989-90 surveys, using schools rather than respondents as the unit of analysis. Only those substances for which there was a significant difference at one or more grade levels appear in the table. A response of "1" meant *never used*. While percentages are easily interpreted, overall statistical tests also are necessary to assess whether or not there was any change since the previous survey in the average frequency of use of each substance.

In the initial series of use questions, three forms of alcohol (beer, wine, and liquor) were included along with other common drugs such as marijuana, cocaine, and medically controlled

substances (e.g., barbiturates or drugs used for the suppression of pain). Examples of drugs that were included in each category or of other terms by which a drug might be known to students were provided. Where appropriate, "street" names for substances were provided (e.g., for cocaine the terms "coke," "rock," "base," "snort," "snow," "crack," and "flake" were listed). The term "liquor" was used for "distilled spirits" in the questionnaire because it was considered the word more familiar to youth; however, in this report we use "distilled spirits" as preferred in the AOD literature. (Tobacco, steroids, polydrug use, and crack use were excluded from this series of questions and are reported separately.)

Table 3
Use of Each Substance at Least Once in Previous Six Months, 1985-90

	Grade 7			Grade 9			Grade 11		
	1985-86 (%)	1987-88 (%)	1989-90 (%)	1985-86 (%)	1987-88 (%)	1989-90 (%)	1985-86 (%)	1987-88 (%)	1989-90 (%)
Beer	41.1	40.3	36.1	61.0	57.7	48.6	69.2	68.3	61.9
Wine	40.1	38.2	39.7	56.1	52.4	51.8	62	59.1	60.5
Spirits	20.8	18.4	15.8	43.7	38.9	34.5	53.1	52.4	45.6
Marijuana	9.7	5.8	6.8	32.2	21.6	19.6	42.1	32.8	27.6
Hashish	1.7	1.0	1.0	9.8	3.1	3.3	13.1	7.6	5.4
Amphetamines	2.2	1.3	2.2	10.5	3.9	5.1	15.3	10.6	8.4
Cocaine	2.8	1.8	2.1	9.7	5.3	5.0	17.6	11.2	7.4
LSD	1.4	0.8	1.3	4.1	3.1	2.9	6.0	6.4	5.9
Mushrooms	3.4	3.1	3.2	5.8	3.3	4.7	8.8	5.3	5.2
Other psychedelics	1.2	0.7	1.1	2.0	0.9	0.8	2.5	1.4	1.2
Barbiturates	1.2	0.8	0.8	4.3	1.9	1.3	4.0	2.2	2.9
Sedatives	1.0	0.9	1.0	3.9	1.9	1.5	5.4	3.2	2.7
Tranquilizers	2.7	2.5	2.5	7.2	5.4	3.8	8.1	5.9	6.6
Inhalants	17.6	12.6	10.5	16.3	13.2	11.0	13.8	10.2	8.8
PCP	1.5	1.7	2.3	3.1	2.6	4.0	3.1	3.1	3.2
Heroin	1.1	1.3	1.0	1.1	0.9	1.3	1.2	0.9	1.0
Other narcotics	1.9	1.3	2.6	5.8	4.9	3.7	9.4	7.5	7.1

Any use of specific substance. As indicated in Table 3, the percentage of students drinking beer dropped from 40% to 36% for 7th-grade, from 58% to 49% for 9th-grade, and from 68% to 62% for 11th-grade since the last survey. Similar declines occurred for distilled spirits, consumed in 1987-88 by 52% of 11th-graders compared to 46% currently. The decline in beer drinking was not matched by a similar decline in wine drinking, which pulled marginally ahead of beer at Grades 7 and 9 and was only slightly behind in Grade 11. However, wine consumption at each grade level was still below that reported in 1985-86.

Regarding other drug use among 11th-grade students, significant declines occurred in total use of marijuana, which fell from 33% in 1987-88 to 28% in 1989-90 (vs. 42% in 1985-86); cocaine, which fell from 11% in 1987-88 to 7% in 1989-90 (vs. 18% in 1985-86); and amphetamines, which fell from 11% in 1987-88 to 8% 1989-90 (vs. 15% in 1985-86).

Two-year trends in average use frequency. In Table 4, comparisons are made only for schools participating in all three surveys (38 senior high and 36 intermediate schools). Thus, statistically significant differences between the current and previous surveys cannot be attributed to replacement of some of the original schools by new schools from the same sampling cells. This procedure was used because there was no way to rule out the possibility that replacement schools might differ systematically in average substance use.

For Grade 11, significant declines occurred in the use of seven commonly used substances: beer, distilled spirits, marijuana, hashish, amphetamines, cocaine, and "other psychedelics" (excluding LSD and PCP). For Grade 9, beer and inhalants, as well as several less frequently used substances (barbiturates, tranquilizers, and "other" narcotics), showed significant declines. On the other hand, PCP use among 9th-grade students registered the only significant mean increase for any substance at any grade level (from 2.6% in 1987-88 to 4% currently, as indicated in Table 3). There were no significant declines among 7th-grade students. This probably reflects the very low initial rates of use among 12-year-olds. In other words, significant declines are unlikely when rates of use are near zero to begin with.

Table 4
Significant t-Tests for Mean Use of Substances for Schools, 1987-88 vs. 1989-90

	Grade 7 (n = 32)		Grade 9 (n = 30)		Grade 11 (n = 38)	
	M	*t*	*M*	*t*	*M*	*t*
Beer	1.61/1.64	--	2.19/1.99	2.74**	2.81/2.56	3.13***
Spirits	1.29/1.25	--	1.76/1.63	--	2.21/1.97	3.60***
Marijuana	1.11/1.12	--	1.48/1.42	--	1.93/1.80	1.97*
Hashish	1.02/1.01	--	1.06/1.06	--	1.17/1.12	2.36*
Amphetamines	1.02/1.03	--	1.11/1.08	--	1.28/1.19	3.14**
Cocaine	1.04/1.03	--	1.10/1.08	--	1.29/1.17	3.52***
Other psychedelics	1.01/1.01	--	1.02/1.00	--	1.04/1.02	2.15*
Barbiturates	1.01/1.00	--	1.03/1.00	3.16***	1.06/1.04	--
Tranquilizers	1.03/1.04	--	1.08/1.04	2.58**	1.12/1.10	--
Inhalants	1.17/1.16	--	1.20/1.15	1.97*	1.19/1.14	--
PCP	1.02/1.03	--	1.03/1.06	2.16*	1.06/1.04	--
Other narcotics	1.03/1.02	--	1.08/1.04	2.52**	1.17/1.13	--

Note. Order of means corresponds to 1987-88 vs. 1989-90 samples.
*p < .05. **p < .01. ***p < .001.

Total alcohol, marijuana, and other drug use. Table 5 compares total use of alcohol (beer, wine, and spirits), marijuana (marijuana and hashish), and all other drugs (at least once) over the previous six months for the 1989-90 and the 1987-88 surveys.

Drinking of some form of alcohol was reported by 50% of 7th-, 62% of 9th-, and 75% of 11th-grade students. For all three grade levels, the decline in total alcohol use since the 1987-88 survey was statistically significant.

Marijuana/hashish use was reported by 7% of 7th-, 19% of 9th-, and 28% of 11th-grade students. While there appeared to be declines at each grade level since the previous survey, only the decline for 11th-graders (33% down to 28%) was statistically significant.

Reports of use of all other drugs (PCP, LSD, inhalants, etc.) also showed apparent declines at each grade level since the previous survey. Again, only that for Grade 11 was statistically significant (26% down to 23%).

Table 5
Total Alcohol, Marijuana, and Other Drug Use, 1987-88 vs. 1989-90

	Grade 7		Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Alcohol	53.3	49.7	68.5	62.2	78.1	75.0
Marijuana[a]	7.3	6.8	21.1	19.0	32.8	27.9
Other drug	17.5	16.5	20.2	18.9	25.9	23.0

[a]Includes hashish.

Weekly use. Results for weekly or more frequent use (during the past six months) of the six most commonly used substances are shown in Table 6. Among 7th-graders, weekly or more frequent use of even these commonly used substances has always been close to nil. Among 11th-grade students, use rates declined for beer from 20% in 1987-89 to 16% for 1989-90; for marijuana, use rates declined only marginally (9% to 7%). Ninth-grade rates of weekly use for both of these substances remained about the same, at 8% for beer and 4% for marijuana. Unfortunately, weekly wine use information for 1987-88 was not gathered, but rates for the current survey were 6% for 9th-graders and 7% for 11th-graders (not included in tables), indicating that despite the rise in wine popularity, beer remains the most popular alcoholic beverage for regular use.

Daily use. Use of the same six substances on a daily basis (during the past six months) is presented in Table 7. Among 11th-grade students, very frequent use of marijuana may have declined slightly, from 4.3% in 1987-88 to 3.4%. Nevertheless, use remained much below the rate of 7.4% found in the 1985-86 survey. Among 9th-graders, marijuana use leveled out at 2%. Use of other substances, with the exception of beer, was reported by less than 1% of students at all grade levels. Beer drinking remained at under 1% among 7th-graders, rose slightly among 9th-graders (from 1.4% to 2.1%), and remained at 2.3% among 11th-graders.

Table 6
Use of Six Common Substances Once a Week or More Often

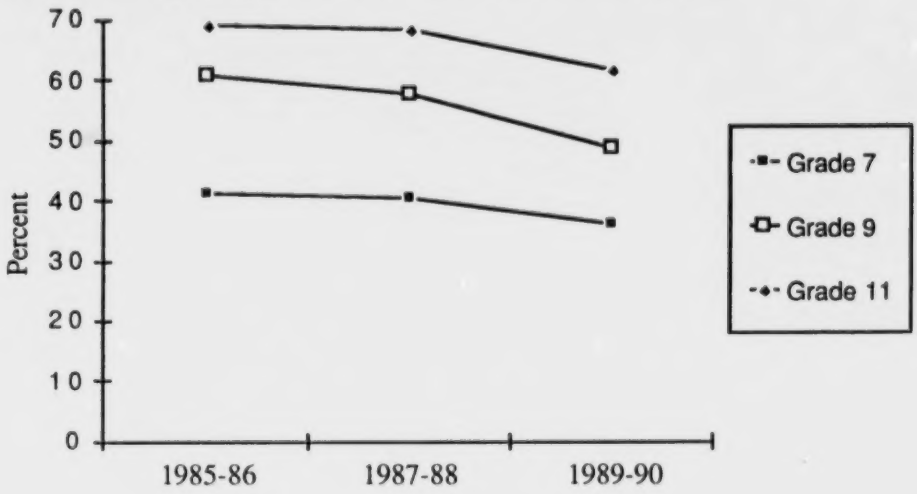
	Grade 7			Grade 9			Grade 11		
	1985-86 (%)	1987-88 (%)	1989-90 (%)	1985-86 (%)	1987-88 (%)	1989-90 (%)	1985-86 (%)	1987-88 (%)	1989-90 (%)
Beer	2.4	1.6	2.1	11.9	8.5	7.8	20.1	19.5	16.1
Spirits	1.2	0.9	0.9	7.0	4.4	3.4	9.6	7.8	5.8
Marijuana	0.9	0.6	0.9	9.3	4.3	4.5	13.4	8.5	6.9
Amphetamines	0.2	0.0	0.3	1.2	0.7	0.8	2.4	1.6	1.4
Cocaine	0.4	0.3	0.4	1.4	0.8	0.6	3.0	1.2	0.7
Inhalants	0.8	0.6	1.2	1.1	1.0	0.9	0.9	0.7	0.6

Five-year trends in beer and marijuana use. Trends in total beer and marijuana consumption over the three surveys (1985-86, 1987-88, and 1989-90) are presented in Figures 1 and 2 (see Table 3 for specific percentages). Beer has always been one of the most popular drugs among adolescents, but there are signs of a very moderate decline in use in all three grade levels, mainly since the last survey, and perhaps more for Grade 9 than for 7 and 11.

Table 7
Use of Six Common Substances Daily or More Often

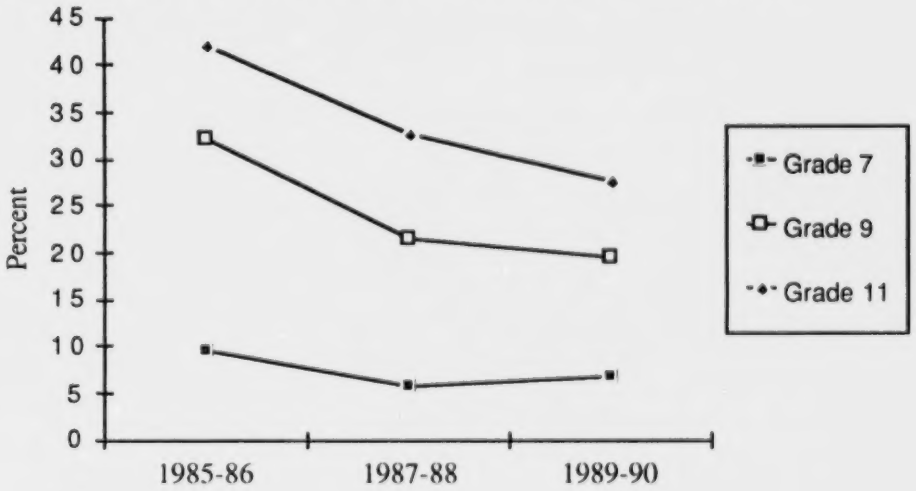
	Grade 7			Grade 9			Grade 11		
	1985-86 (%)	1987-88 (%)	1989-90 (%)	1985-86 (%)	1987-88 (%)	1989-90 (%)	1985-86 (%)	1987-88 (%)	1989-90 (%)
Beer	0.7	0.5	0.9	2.4	1.4	2.1	3.0	2.3	2.3
Spirits	0.2	0.2	0.6	1.4	0.8	0.8	1.4	0.8	0.5
Marijuana	0.4	0.3	0.7	5.2	2.1	2.2	7.4	4.3	3.4
Amphetamines	0.1	0.0	0.2	0.4	0.3	0.6	1.0	0.5	0.5
Cocaine	0.2	0.1	0.3	0.7	0.2	0.3	1.1	0.4	0.2
Inhalants	0.5	0.1	0.5	0.6	0.5	0.4	0.2	0.4	0.1

Figure 1
Total Percentage Using Beer in Previous Six Months, 1985-90



Trends in total marijuana use over the three surveys are shown in Figure 2. There is no discernable trend over the three surveys for Grade 7, with total use remaining below 10%. There are noticeable declines for Grades 9 and 11. For both grades, however, the recent decline is not as sharp as that between the 1985-86 and 1987-88 surveys. Still, the patterns are consistent.

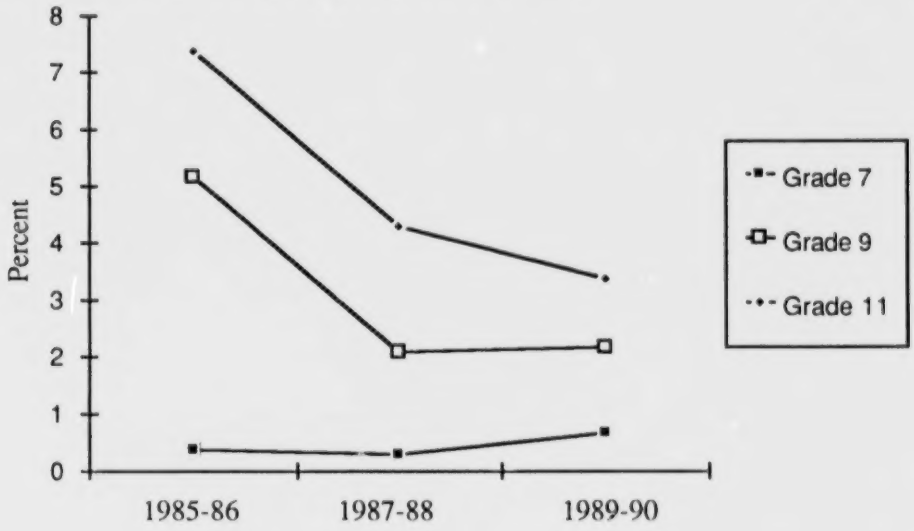
Figure 2
Total Percentage Using Marijuana in Previous Six Months, 1985-90



Trends over the three surveys in the percentage of daily marijuana users are shown in Figure 3 (also see Table 7). These patterns are very similar to those for total (ever) use in

Figure 2, with daily use dropping rather sharply between the 1985-86 and 1987-88 surveys, then more or less leveling out (from 0.4%, 5.2%, and 7.4% for Grades 7, 9, and 11, respectively, in 1985-86 to 0.3%, 2.1%, and 4.3% in 1987-88 and 0.7%, 2.2%, and 3.4% in 1989-90).

Figure 3
Total Percentage Using Marijuana Daily, 1985-90



Polydrug use. Students were asked how many times in the previous six months they indulged in polydrug use, i.e., the consumption on the same occasion of any combination of two or more drugs in different categories (e.g., beer and marijuana), (*Item 18*). Response alternatives were on a 5-point scale from *never/don't use* to often, *more than 10 occasions*. The percentage of students engaging in polydrug use is shown in Table 8. Only among 11th-grade students did a moderate overall decline (from 31% in 1987-88 to 27% currently) appear. As in earlier surveys, polydrug use was reported at once a month or less. Among both 9th- and 11th-grade students, the percentage reporting frequent (more than once a month) polydrug use remained about the same (about 5% and 9%, respectively).

Crack use (lifetime). Lifetime (ever) use of cocaine in the form of "crack" was assessed on a 5-point scale from *never/don't use* to *more than 10 times* (*Item 19*). The responses are summarized in Table 9. As in the last survey, the majority of students who tried crack at each grade level did so only once or twice. For Grades 7 and 9, there was no change in crack use since the last survey, either in overall use (2.3% in Grade 7 and 4.7% in Grade 9) or at any particular level of use. For Grade 11, overall use declined slightly (from 9% to 7%).

Table 8
Polydrug Use in Previous Six Months

	Grade 7		Grade 9		Grade 11	
Frequency	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
1 - 2 times	6.4	6.1	12.5	11.2	14.4	11.3
3 - 6 times	1.7	2.4	4.4	4.5	6.9	7.1
7 - 10 times	0.3	1.1	1.8	1.9	4.2	3.5
> 10 times	0.4	0.7	2.5	3.1	5.0	4.8
Total	8.8	10.2	21.2	20.7	30.5	26.7

Table 9
Use of Cocaine in Form of "Crack"

	Grade 7		Grade 9		Grade 11	
Frequency	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
1 - 2 times	1.8	1.9	3.2	3.4	5.3	4.0
3 - 6 times	0.4	0.2	0.6	0.8	2.2	1.1
7 - 10 times	0.0	0.0	0.4	0.0	0.6	0.6
> 10 times	0.1	0.2	0.5	0.5	1.3	1.0
Total	2.3	2.3	4.7	4.7	9.3	6.7

Cigarette use (past month). Students were asked how often in the previous month they smoked cigarettes (*Item 46*). The response scale varied from *never, I don't smoke cigarettes* to *more than a pack a day.* Table 10 reveals that the percentage of students who smoked cigarettes even as seldom as "a few times" was less than the percentage of students who used any other drug. At Grade 11, for example, 65% abstained from drugs other than alcohol, compared to 76% from cigarettes (see Table 16).

About 5% of 7th-, 9% of 9th-, and 13% of 11th-grade students smoked one or more cigarettes daily. The percentage of students who smoked *less* than once a day declined slightly at each grade level since the previous survey, and the number of abstainers increased. On the other hand, the percentage who smoked daily increased slightly at Grades 7 and 9 and remained the same at Grade 11. Very few students at any grade level smoked one-half a pack (10 cigarettes) or more per day (less than 1% for 7th-, 2% for 9th-, and 3% for 11th-grade).

Table 10
Frequency of Cigarette Use

	Grade 7		Grade 9		Grade 11	
Frequency (per day)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Never	83.6	83.7	76.0	77.0	73.3	76.3
A few times	13.0	11.2	16.7	13.7	14.1	11.3
1 - 2 times	1.2	2.3	1.9	2.5	2.5	2.8
3 - 6 times	1.0	1.3	1.9	3.1	3.7	3.9
7 - 10 times	0.6	0.6	2.1	1.5	2.8	2.7
11 - 20 times	0.4	0.5	1.1	1.5	2.6	2.4
> 20 times	0.1	0.3	0.4	0.7	1.0	0.7

Smokeless tobacco use (past month). Frequency of tobacco dipping and snuffing in the past month was ascertained using a 6-point scale ranging from *none* to *more than 10 times per day* (*Item 47*). The results in Table 11 show that very few students engaged in this practice, i.e., less than 4% of 7th-grade, 6% of 9th-grade, and 7% of 11th-grade students. Most students who did use smokeless tobacco did so on, less than a daily basis. These results are very similar to those of 1987-88.

Table 11
Frequency of Smokeless Tobacco Use

Frequency	Grade 7		Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
None, don't dip or snuff	96.8	96.3	95.3	93.6	94.8	93.2
Once to a few times (not daily)	2.3	2.2	3.6	4.1	3.4	4.3
1 or 2 times a day	0.5	0.6	0.4	0.9	0.3	1.0
3 to 5 times a day	0.3	0.4	0.4	0.7	1.0	0.9
6 to 10 times a day	0.1	0.2	0.1	0.2	0.2	0.3
More than 10 times a day	0.0	0.2	0.1	0.5	0.3	0.2

Steroid use (past year). Table 12 summarizes reports by 9th- and 11th-grade students of use of steroids in the last year on a scale from *none* to *regularly, have been on a program of steroid use* (*Item 48*). Less than 3% of students at both grade levels reported any steroid use. There were no changes since the previous survey.

Table 12
Steroid Use in Past Year, Grades 9 and 11

Frequency	Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Never	97.9	97.4	97.8	97.3
A few times	2.0	2.0	1.6	2.2
Regularly	0.2	0.5	0.6	0.5

High-risk, conventional, and abstaining students. As was done with the 1987-88 data, 9th- and 11th-graders were categorized as high-risk users (HRU), conventional users (CON), or abstainers (ABS) based on reported use in the previous six months.[5] While all use of alcohol and other drugs by young people implies a degree of risk, certain patterns of use are especially dangerous. Specifically, high-risk user status was defined as a pattern of drug use indicative of serious involvement coupled with a history of engaging in practices widely viewed as risky or dangerous. The latter included using cocaine in any form (including "crack"), frequent polydrug use (three or more times), regular (weekly or more frequent) marijuana use, or a total score of 14 on Question 1 on drugs other than cocaine and marijuana. Engaging in any one of these practices resulted in a student being classified as HRU.

Two other categories of students were defined: abstainers (ABS), who used no substances at all (including alcohol) during the previous six months and conventional users (CON), who were all those students left over after removing HRU and ABS students. Here the term "conventional" means simply that this third group is the largest of the three, including more than one-half of the students in Grade 11. Virtually all CON students drink alcohol at least occasionally, and many have used marijuana a few times, though less than weekly.

Figures 4 and 5 compare the percentages of HRU, CON, and ABS students for Grades 9 and 11 for the 1987-88 and current surveys. The proportion of HRU students in Grade 9 remained unchanged at 14%, while the number of abstainers over the past six months increased (from 28% in 1987-88 to 34% currently). Among 11th-graders, the percentage of HRU students declined slightly (from 23% in 1987-88 to 21% currently), and the number of abstainers increased (from 19% to 23%). The overall decline in substance use would appear to occur primarily within the group of students labeled here as "conventional," especially in Grade 9, where the increase in the percentage of ABS students appears to come from the CON group only. (For an indication of lifetime abstinence, see Tables 13-14.)

Use cessation. In two new questions, students who used alcohol or other drugs in the past were asked whether they: (a) continued to use; (b) stopped, but started using again; or (c) did not use alcohol and other drugs for at least one year (*Items 34 and 35*). These two questions, which were new to the survey, made it possible to distinguish between students who stopped but started again after less than a year and those who were abstinent for a year or more. The responses revealed important differences between alcohol and other drugs.

[5]See Skager and Frith (1989).

Figure 4
Comparison of HRU, CON, and ABS Students in Grade 9, 1987-88 vs. 1989-90

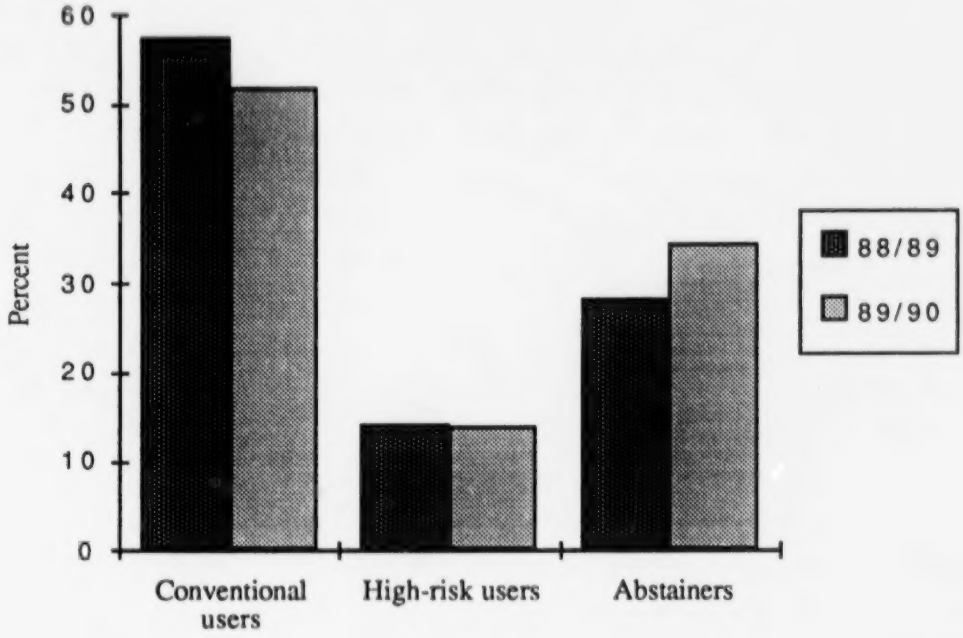
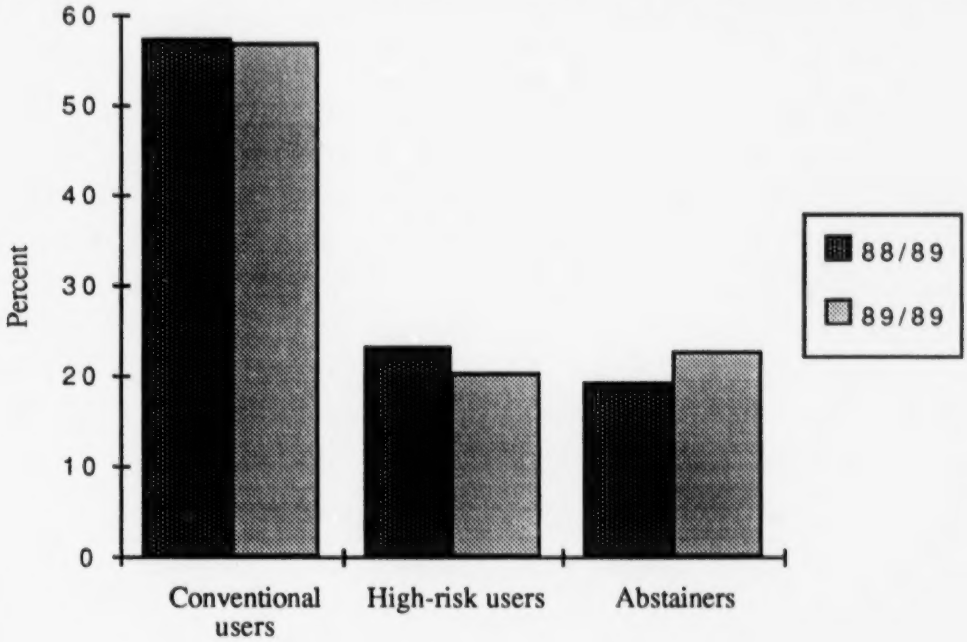


Figure 5
Comparison of HRU, CON, and ABS Students in Grade 11, 1987-88 vs. 1989-90



The percentages of students who did and those who did not stop drinking alcohol are provided in Table 13. Whereas 38% of 9th- and 50% of 11th-grade students continued to be occasional users, 14% and 13%, respectively, reported that they drank alcohol in the past, but did not consume any during the past year. Smaller percentages (4% in 9th- and 7% in 11th-grade) stopped but started drinking again.

The number of discontinuers of alcohol are far less numerous than those for other drugs. Table 14 shows that 6% of 9th- and 9% of 11th-grade students stopped using other drugs for at least one year, suggesting that discontinuation may be permanent. In addition, 4% of the former and 8% of the latter reported having stopped for less than a year, and 2% and 4%, respectively stopped but started again. Thus, whereas 18% of the 11th-graders currently classified themselves as users, 17% classified themselves as discontinuers and an additional 4% stopped for some period. In short, a considerable proportion of students who experimented with drugs other than alcohol stopped using the drugs, often for one year or more.

In short, drug use is a very fluid phenomenon, and simply because someone tries a drug does not mean his/her use will continue, much less escalate. A considerable proportion of marijuana experimenters stopped using the drug, often for one year or more, suggesting that discontinuation may be permanent. However, the number of discontinuers of alcohol were far less numerous.

Table 13
Voluntary Cessation of Alcohol Use in Grades 9 and 11

	Grade	
Occurrence	9 (%)	11 (%)
No, never drank alcohol	44.4	30.0
No, still drink occasionally	37.7	49.5
Yes, but started drinking again	4.1	7.1
Yes, no alcohol for the past year	13.8	13.4

Lifetime abstinence. In addition to the statistics on abstinence over the past six months reported above, Tables 13 and 14 provide an indicator of lifetime abstinence, suggesting that 44% of 9th- and 30% of 11th-graders never tried alcohol, and that 79% and 66%, respectively, never tried other drugs. Tables 15 and 16 (discussed below) provide another indicator that suggests that 33% and 19% of 9th- and 11th-graders, respectively, did not try alcohol and 88% and 65%, respectively, did not try other drugs. For alcohol these rates are about 10% lower than indicated in Table 13 and for other drugs, they are 10% higher than indicated in Table 14 for 9th- and about the same for 11th-graders.

Table 14
Voluntary Cessation of Drug Use in Grades 9 and 11

	Grade	
Occurrence	9 (%)	11 (%)
No, never use drugs	78.5	66.0
No, still use drugs occasionally	9.4	13.2
Yes, but started using again	2.3	4.3
Yes, but it has not been whole year	4.1	7.8
Yes, no drugs for the past year	5.7	8.7

First Use and Intoxication

Several questions explored the circumstances surrounding the first use of and intoxication from alcohol or other drugs. Students who used alcohol or other drugs at least once in their lifetime were asked to write in the age at which they first: (a) tried alcohol; (b) felt high or intoxicated from alcohol; (c) tried drugs; or (d) felt high from drugs (*Items 20-23*). Students also could indicate if they never used (lifetime) each class of substances. The substance/s used the first time the student got "high" was/were assessed using the following categories: never high or intoxicated; alcohol (beer, wine, spirits, etc.); marijuana or hashish ("grass," "weed," "hash"); cocaine or "crack"; inhalants ("glue," "paint," "rush"); and "other" (*Item 24*). Only 9th- and 11th-grade students were asked this question, which provides a direct estimate of the percentage of students who, whether from alcohol or other drugs, were high or intoxicated at least once. Other questions inquired

about the location of first use (*Item 26*) and whether alcohol was consumed prior to the use of the first other drug (*Item 27*).

Age of first alcohol use. Table 15 summarizes students' reports on the age at which they first tried alcohol. Age categories at the top of the table represent the modal age for each grade level. The numbers reading from left to right along the diagonal are the percentages of students at each grade level who tried alcohol.

By Grade 7 or age 12, one-half (51%) of the respondents indicated that they tried alcohol (compared to 54% in 1987-88). This is very close to the 49.7% who indicated any use in the past six months (Table 3). Among 9th-graders, 67% reported that they tried alcohol by age 14, almost the same as in 1987-88 (68%). Finally, 81% of 11th-graders tried alcohol by age 16, slightly less than in the previous survey (83%). The very moderate declines since the previous survey are in the right direction, but hardly reflect a qualitative change in the frequency of experimentation with alcohol at any grade level.

The decline in the percentage of youth in each grade level reporting alcohol use by age 12 (from 50.9% of 7th-graders to 38.6% of 11th-graders) should not be interpreted as indicating current 7th-graders are beginning to try alcohol earlier. Rather, it probably reflects the phenomenon of "selective memory," whereby 11th-graders are not as clear as to when they began alcohol use.

Table 15
Alcohol Experimentation at Least Once by Age and Grade Level

	% by Age 11	% by Age 12	% by Age 14	% by Age 16
Grade 7				
1987-88	45.8	54.1	--	--
1989-90	43.9	50.9	--	--
Grade 9				
1987-88	34.4	47.9	67.9	--
1989-90	34.5	46.2	66.7	--
Grade 11				
1987-88	28.3	38.8	66.4	83.2
1989-90	27.6	38.6	64.0	81.4

Age of first other drug use. As summarized in Table 16, the following percentages were reported for the age of having ever (if at all) tried a drug other than alcohol or tobacco: 8% of

7th-graders tried one drug by age 12, 22% of 9th-graders tried one drug by age 14, and 35% of 11th-graders tried one drug by age 16. For the first two grade levels, a decline of only about 1% occurred since the last survey. In contrast, 7% fewer 11th-grade students on the current survey reported experimenting with other drugs. The decline is substantial compared with the initial 1985-86 survey, from a majority of 51% of 11th-grade students to a minority of about one-third.

Contrary to the case with alcohol, there was not a great cohort difference in age of reported use for drugs other than alcohol. Eight percent of 7th-graders and 9.5% of 11th-graders reported experimentation by age 12. This probably reflects the fact that the first other drug use is more memorable than the first use of alcohol.

Table 16
Other Drug Experimentation at Least Once by Age and Grade Level

	% by Age 11	% by Age 12	% by Age 14	% by Age 16
Grade 7				
1987-88	5.8	9.0	--	--
1989-90	6.1	8.0	--	--
Grade 9				
1987-88	6.1	11.5	23.4	--
1989-90	5.3	9.8	21.8	--
Grade 11				
1987-88	5.8	10.2	27.2	42.4
1989-90	5.3	9.5	23.3	35.3

Age of first alcohol intoxication. Table 17 shows that by age 12, 13% of 7th-grade students were drunk at least once (compared with 14% in 1987-88). For 9th-graders, the level was 34% (compared with 38% in 1987-88) and for 11th-graders it was 55% (compared with 62% in 1987-88). The percentage of students who reported being intoxicated from alcohol declined, as would be predicted from the parallel declines in total use of alcohol summarized earlier. Still, one-third of 9th-graders and the majority of 11th-graders were drunk at least once.

The data on age of first intoxication is consistent across grade levels. That is, 13.4% of 7th-graders and 16% of 9th- and 11th-graders reported intoxication by age 12. Similarly, rates reported by 9th- and 11th-graders for intoxication by age 14 were very similar (34.3% and

36.8%, respectively). Thus, it appears that about 15% of youth were intoxicated by age 12 and one-third by age 14.

Table 17
First Alcohol Intoxication by Age and Grade Level

	% by Age 11	% by Age 12	% by Age 14	% by Age 16
Grade 7				
1987-88	10.0	14.5	--	--
1989-90	9.5	13.4	--	--
Grade 9				
1987-88	11.2	19.0	37.6	--
1989-90	9.5	16.3	34.3	--
Grade 11				
1987-88	7.8	14.6	40.3	61.5
1989-90	8.8	16.2	36.8	54.7

Age of first other drug intoxication. Table 18 provides the percentage of students who reported intoxication on a drug other than alcohol, i.e., 7% of 7th-, 18% of 9th-, and 31% of 11th-grade students. The consistency of the data reported by each grade level supports a rate of 7% for first other drug intoxication by age 12. There was no decline among 7th-graders and possibly only a slight drop among 9th-graders. Again, the important drop (about 5%) was among 11th-graders. Since the 1985-86 survey the ever intoxicated rate for 11th-graders dropped 14%, from 45.1%.

Avoidance of intoxication. Ninth- and 11th-graders were asked to indicate the first substance on which they were intoxicated or high, if any. This provided an estimate of how many students were not high by self perception. Table 19 reveals that 59% of 9th- and 41% of 11th-grade students reported never having felt high on any substance they tried, an increase of 5% among 9th- and 7% among 11th-grade students compared with 1987-88. The magnitude of this increase is most striking at Grade 11, since only 30% claimed that they were never high in the 1985-86 survey.

Table 18
Other Drug Intoxication at Least Once by Age and Grade Level

	% by Age 11	% by Age 12	% by Age 14	% by Age 16
Grade 7				
1987-88	3.5	6.0	--	--
1989-90	3.8	6.7	--	--
Grade 9				
1987-88	4.6	9.2	19.9	--
1989-90	3.6	7.2	17.5	--
Grade 11				
1987-88	4.2	8.1	22.9	36.1
1989-90	3.9	7.0	19.2	31.0

First intoxicant. Table 19 also reveals that alcohol remained the primary drug of first intoxication. One in three 9th-graders and about one-half of 11th-grade students had their first intoxication experience with some form of alcohol. The only other drug cited by appreciable numbers of students as the first drug of intoxication was marijuana, cited by 7% of 9th- and 9% of 11th-grade students.

Table 19
First "High" on Various Classes of Substances vs. "Never High," Grades 9 and 11

	Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Never high/intoxicated	53.7	58.6	34.4	40.8
Alcohol	35.9	32.1	52.2	48.2
Cocaine/crack[a]	--	0.4	--	0.3
Marijuana/hashish	9.4	6.7	12.2	9.0
Amphetamines	0.2	0.0	0.5	0.2
Inhalants	0.4	0.7	0.4	0.4
Other	0.5	0.8	0.2	0.4

[a]Alternative not included in earlier surveys.

Alcohol and initiation of other drug use. The disinhibiting effects of alcohol are likely to be associated with first other drug use among many young people. This hypothesis is supported by the finding that first drug use often occurs at parties *(Item 27).* Students were asked whether they consumed any alcohol the first time they tried another drug. In addition to the disclaimer item, responses ranged from "no, did not drink alcohol first" to "yes, quite a bit" (3 or more beers, etc.).

Table 20 shows that 79% of 7th-, 68% of 9th-, and 55% of 11th-grade students had at least one drink before they tried their first other drug. The modal amount consumed was just one drink. Unfortunately, it is impossible to determine how many would have avoided their first drug experience were they not drinking. A reasonable operating hypothesis is that alcohol facilitates first drug use for many, if not most, children and teenagers. Even at age 16, over one-half of the respondents who used drugs were drinking on the occasion of first use. Among 12-year-olds, a student who was not drinking on the occasion of first drug use was in a distinct minority.

Table 20
Use of Alcohol in Conjunction with First Other Drug Use

	Grade		
	7 (%)	9 (%)	11 (%)
No, did not drink alcohol first	20.9[a]	31.9	44.5
Yes, one drink	61.6	39.1	30.1
Yes, two drinks	10.6	12.6	11.8
Yes, three or more drinks	7.0	16.1	13.6

[a]Percentage in category of those who used.

Location of first use. In a question added to the current survey, students were asked where they first tried a drug other than alcohol. Alternatives included: with friends at a party; with friends in a car; at a public event; at school; at home (with friends or family); alone (home or elsewhere); and other.

Although all of the alternatives were selected by at least some students, Table 21 indicates that two were selected much more often than others: "with friends at a party" and "at home

with friends." The latter was selected most frequently by 7th-graders (37% of those who used drugs at least once) and the former most frequently by 11th-graders (33%). Whether younger or older, most students use drugs for the first time with friends. Younger students are more likely to try drugs at home and older students at a party. In other words, a public event such as a rock concert is a far less likely location for first drug use than is a student's own home or a friend's home. Students are not likely to try drugs for the first time while in a car with friends or at school. On the other hand, student parties are a common site of first drug use, especially for the older student.

Table 21
Location of First Use of Drugs

	Grade		
	7 (%)	9 (%)	11 (%)
With friends at a party	20.5[a]	30.0	33.3
With friends in a car	2.4	7.5	7.4
At a public event	6.6	4.3	4.1
At school during regular day	4.2	7.3	7.2
At home with friends	37.2	24.8	28.6
Alone	9.4	5.2	3.4
Other	19.8	20.5	15.9

[a]Percentage in category of those who used.

Use Circumstances

Several questions inquired about the situations under which or locations where students generally used drugs.

Location of drug use. Students in Grades 9 and 11 were asked, "Where do most of the kids at this school who use drugs *take* them?" (*Item 53*). Response options included: "home," "school, school events such as dances or sports," "parties or social events outside of school,"

"with friends outside of school," and "other, don't know." These results are provided in Table 22.

The most popular alternatives at both Grades 9 and 11 were social events outside of school (48% at 9th- and 64% at 11th-grade) and with friends outside of school (49% and 58%, respectively). Other alternatives attracted only one-quarter to one-third of the responses at both grade levels. Nevertheless, 21.4% and 24.4% of 9th- and 11th-graders listed school during the day as the place where most kids used drugs (down from 26.4% and 31.8%, respectively, in 1987-88). These rates are consistent with the findings reported for intoxication at school (see Tables 22 and 23). Compared with the 1987-88 survey, selection of each response declined slightly. The reason for the overall drop in the selection of the available options, regardless of content, is not apparent.

Table 22
Perception of Where Most Kids Use Drugs, Grades 9 and 11

	Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Home	21.3	17.6	30.9	22.0
School during the day	26.4	21.4	31.8	24.4
School events (games, dances)	21.5	16.3	35.2	24.2
Social events out of school	52.4	48.1	67.6	64.1
With friends outside school	53.6	49.3	65.7	58.0
Other, don't know	34.5	32.5	30.2	26.0

Intoxication at school by peers. Students in Grades 9 and 11 were asked how often in the past year they were aware that another student in class was "high" on alcohol or other drugs (*Item 31*). Response options varied from "never" to "every day." There also was a "don't know" option. As summarized in Table 23, 18% of 9th- and 26.5% of 11th-grade students were aware once a week or more often that another student in one of their classes was high. These percentages show no meaningful changes since the previous survey. At the other end of

the scale, somewhat more students than in 1987-88 reported that they never saw another student high (32% of 9th-graders and 20% of 11th-graders, compared to 24% and 14% in 1987-88).

A partial explanation of the lack of change in the first set of numbers may lie in the differences found in the 1987-88 survey between high-risk users (HRU) and others. The HRU group was much more frequently aware that other students were high in class than were conventional users and abstainers. This finding was not surprising, since HRU students would be much more likely to know who among their peers was using alcohol or other drugs. In general, HRU students were the only students who reported having gone to class high. Since the proportion of HRU students did not change in the interim, the percentage of students reporting other students being high in class also would not be likely to change.

Table 23
Noticing Another Student at School "High," Grades 9 and 11

	Grade 9		Grade 11	
Frequency	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Never	24.2	32.4	14.5	19.5
Rarely 1-2 times a year	28.2	28.3	30.6	28.0
Sometimes, 1 time a month	17.0	14.4	22.0	20.1
About once a week	12.9	10.6	16.3	16.8
Every day	7.8	7.0	9.2	9.7
Don't know	9.9	7.4	7.4	5.9

Intoxication at school by respondents. Students were asked whether they were ever high on alcohol or drugs while at school (*Item 32*). Response options varied from "never" to "more than six times." Tables 24 shows that 4% of 7th-, 14% of 9th-, and 22% of 11th-grade students went to school intoxicated at least once. Among 11th-graders, 7% were high in school more than six times. At Grades 9 and 11 these percentages are very close to the percentages of high-risk users reported earlier. As noted above, analysis of 1987-88 data

showed that HRU students were virtually the only students who went to school under the influence of alcohol or other drugs.

Table 24
Students "High" at School

	Grade		
	7 (%)	9 (%)	11 (%)
Once or twice	3.3	8.5	10.6
3-6 times	0.5	1.7	3.8
More than 6 times	0.4	3.3	7.3
Total	4.2	13.5	21.7

Drinking and driving. Table 25 summarizes student responses to a question about how often they ever drove a car while drinking or were a passenger in a car while the driver was drinking (*Item 33*). The response scale varied from "never" to "more than 6 times." Twenty-three percent of 7th- and 9th-graders and 35% of 11th-graders were in a car when they or someone else was driving under the influence of alcohol. Doing so several times was reported by 6% of 7th-, 9% of 9th-, and 14% of 11th-graders.

Table 25
Frequency of Drinking While Driving

	Grade		
	7 (%)	9 (%)	11 (%)
Once or twice	16.7	13.9	21.1
3-6 times	2.4	4.3	6.4
More than 6 times	3.9	4.5	7.5
Total	23.0	22.7	25.0

Note. Grade 7 version of this item states "ever been in a car." Grades 9-11 version states "ever driven a car."

Adult Awareness, Use, and Attitudes

This section presents information on student beliefs about parental or other adult attitudes toward, awareness of, and patterns of AOD use.

Parental awareness of respondents' use. A pair of questions asked whether students' parents were aware that they used alcohol or other drugs, with response alternatives ranging from "sure that they do not know" to "sure that they do know" (*Items 28 and 29*). Table 26 shows that only 11% of 7th-graders and about 20% each of 9th- and 11th-graders were certain that their parents did *not* know about their AOD use. In contrast, 23% of 7th- and 9th-grade students and 31% of 11th-grade students knew that their parents were fully aware that they drank. If the percentage who "think they do know" is added, then a little over one in four of 7th-, 3 in 10 of 9th-, and 4 in 10 of 11th-grade students apparently drink alcohol with their parents' knowledge. This should not, however, be interpreted as indicating parental approval; many of these parents may be against such use and attempting to stop it.

Table 26
Perception of Parent Knowledge of Drug/Alcohol Use

	Grade		
Knowledge level	7 (%)	9 (%)	11 (%)
Alcohol			
Sure they do not know	11.0	22.2	19.8
Think they do not know	2.2	5.6	7.8
Not sure	5.3	8.4	10.0
Think they do know	3.5	6.4	10.1
Sure they know	22.6	22.7	31.2
Drugs			
Sure they do not know	6.4	14.6	19.6
Think they do not know	1.3	2.9	4.1
Not sure	1.5	2.9	3.7
Think they do know	0.9	1.6	2.3
Sure they know	3.7	3.2	7.7

Parents appear to be less aware of other drug use by students or students go to greater lengths to conceal it from them. For example, 20% of 11th-graders who used drugs were sure that their parents did not know it, while only 10% either thought or were sure that their parents

knew. At Grade 9, the difference between the two percentages was even more marked (15% not aware vs. about 5% aware).

Adult use. Students in Grades 9 and 11 were asked in four separate questions how many adults they knew used alcohol, marijuana, cocaine, or pills such as sleeping pills or tranquilizers (*Items 36-39*). They were provided with a five-point scale ranging from "none" to "all." It should be noted that definitions of who is "adult" are likely to vary among respondents of different ages. It is possible, for example, that a 12-year-old in Grade 7 would consider an 18-year-old sibling as an adult. The results, summarized in Table 27, reveal that substantial numbers of young people knew at least some adult who used psychoactive substances other than alcohol and that close to 90% knew adults who used alcohol.

Since the previous survey, there have been no changes in the percentage of adults who use alcohol known by either 9th- or 11th-grade students, nor would such a change have been predicted. Slightly less than one-half of 9th-graders and somewhat over one-half of 11th-graders reported that many or all adults they knew drank alcohol.

Relatively few students in any of the surveys reported that many or most adults they knew used marijuana. But the "some adults I know" category is of particular interest. Here there is evidence of a small decline among 9th-graders (from 33% to 29%) and a more substantial decline among 11th-grade students (from 40% to 34%).

There was a small decline at Grades 9 and 11 for students who reported that they knew adults who used cocaine. For 9th-graders, the decline was only 2% (from 28% to 26%), but for 11th-graders it was 6% (from 38% to 32%).

There also were moderate drops in the percentage of students who reported that they knew some adults who used pills (to get high). More students reported adult abuse of pharmaceutical substances than of cocaine, but less than marijuana/hashish.

Table 27
Knowing Adults Who Use Alcohol, Marijuana, Cocaine or Pills, Grades 9 and 11

Substance	Adults using None (%)	Some (%)	Many (%)
Alcohol			
Grade 9			
1987-88	11.7	41.8	46.5
1989-90	12.4	40.6	47.0
Grade 11			
1987-88	7.6	37.2	55.1
1989-90	10.3	34.7	55.1
Marijuana/Hashish			
Grade 9			
1987-88	53.9	32.6	13.5
1989-90	59.2	28.8	11.9
Grade 11			
1987-88	43.6	40.1	16.2
1989-90	51.3	33.8	14.9
Cocaine			
Grade 9			
1987-88	71.9	21.3	6.9
1989-90	74.4	19.2	6.4
Grade 11			
1987-88	61.9	30.2	7.9
1989-90	67.6	23.9	8.4
Pills			
Grade 9			
1987-88	60.3	30.3	9.4
1989-90	63.3	26.5	10.3
Grade 11			
1987-88	57.2	32.2	10.6
1989-90	59.8	28.6	11.6

Parents' attitudes about alcohol and marijuana. Students were asked to rate their parents' attitudes about students' use of marijuana and alcohol on a scale of "strongly opposed" to "strongly favor" (*Items 44 and 45*). The results shown in Table 28 indicate that, regardless of grade level, far more students perceived their parents to be more strongly opposed to marijuana than to alcohol. In addition, a comparison of the first two rows of Table 28 suggests that for all three grade levels in the current survey slightly more students perceived their parents

to be strongly opposed to both alcohol and marijuana than in 1987-88. The differences are small to moderate, but there are no exceptions.

Table 28
Perceptions of Parents' Attitudes About Student Use of Alcohol vs. Marijuana

	Grade 7		Grade 9		Grade 11	
Attitude	Alcohol (%)	Marijuana (%)	Alcohol (%)	Marijuana (%)	Alcohol (%)	Marijuana (%)
Strongly against						
1987-88	63.7	90.8	57.1	89.4	46.9	86.6
1989-90	72.1	91.2	63.9	91.1	53.3	89.2
Moderately against						
1987-88	19.3	3.4	26.6	5.2	32.6	6.7
1989-90	14.5	3.8	22.9	4.3	27.5	5.5
Neutral/favor						
1987-88	17.0	5.8	16.2	5.4	20.5	6.9
1989-90	13.5	5.0	13.2	4.5	19.2	5.2

Student Attitudes and Use

Several questions asked the respondents to describe their perceptions of the attitudes toward, and patterns of, AOD use by their friends or other students. Another series of questions explored the respondents' own attitudes toward, and knowledge of, drugs and drug use, reasons for use or abstinence, and sources of knowledge.

Peer attitudes and use. Two brief vignettes were used to assess perceptions by 9th- and 11th-grade students of their closest friends' attitudes about alcohol and other drugs (*Items 40 and 41*). The first described a student who "usually gets loaded on alcohol or other drugs at parties and acts that way"; the second described a student who "uses alcohol or other drugs at parties or with friends on a regular basis, but who rarely gets obviously loaded or causes any problems." For both vignettes, respondents were asked to choose the response that best fit the reaction of their four or five best friends to the student described. The responses were: (a) "would avoid, see as unhealthy or unfortunate"; (b) "would tolerate, but not be particularly friendly toward"; (c) "would see as OK and sometimes join in with that person"; and (d) "my friends are pretty much like that student as far as drug/alcohol use is concerned."

In Table 29, the last two categories of responses were combined to generate the row labeled "accept/join." Among 9th-graders, 1 in 5 reported that their friends would "accept or join" a student who gets high on alcohol or other drugs at social events and shows it, and about the same percentage would accept/join a student who drinks or uses regularly but does not show signs of intoxication. Among 11th-graders, about one-third gave the same response, although slightly more (about 2%) thought their friends would accept/join the second type of alcohol- or other drug-using student.

Current findings could not be compared to the 1987-88 survey due to the use of a different format for this question. Nevertheless, in previous student surveys respondents believed that their friends would differ very little in their acceptance of other students whose behavior when under the influence is obviously intoxicated and of those whose use is "controlled."

Table 29
Perception of Best Friends' Reaction to Use Vignettes, Grades 9 and 11

Use vignettes	Grade 9 (%)	Grade 11 (%)
Student who gets high on drugs or alcohol and shows it		
Avoid	45.0	32.1
Tolerate	34.6	38.4
Accept/join	20.4	29.6
Student who drinks alcohol or uses drugs and does not show it		
Avoid	44.3	30.0
Tolerate	34.3	37.2
Accept/join	21.3	32.7

Seventh-grade students were asked a separate, more simple question about alcohol and other drug use by their best friends. The responses were: (a) had already used; (b) had not used yet, but would like to; (c) were unsure if they should or not; (d) would probably never use alcohol or other drugs; or (e) don't know. As shown in Table 30, somewhat over one-third of 7th-grade students believed that their closest friends already tried alcohol, while only slightly over 10% believed that they tried other drugs. There was virtually no change in these or other findings in the table since the previous survey, with the single exception of the row representing the "probably never will" alternative. Since the 1987-88 survey there was a moderate drop (from 51% to 44%) in the percentage of students who think their friends will never use marijuana.

Table 30
Perceptions of Best Friends Use of Alcohol vs. Marijuana, Grade 7

Response	Alcohol		Marijuana	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Most already used	36.9	35.3	10.9	11.6
Would like to try	3.2	3.0	3.6	1.9
Not sure if they should	4.8	4.2	4.6	3.3
Probably never will	18.1	18.9	50.5	43.9
Don't know	37.0	38.6	30.4	39.4

Harmfulness of alcohol and marijuana. Students rated the harmfulness of frequent use (daily or almost daily) of alcohol and marijuana on a five-point scale from "extremely harmful" to "harmless" (*Items 42 and 43*). These ratings were combined into three summary categories in Table 31.

Table 31
Ratings of Harmfulness of Frequent Alcohol vs. Marijuana Use

Harmfulness ratings	Grade 7		Grade 9		Grade 11	
	Alcohol (%)	Marijuana (%)	Alcohol (%)	Marijuana (%)	Alcohol (%)	Marijuana (%)
Extremely						
1987-88	40.9	76.0	36.6	63.9	42.4	60.4
1989-90	46.7	76.9	41.4	67.8	48.0	66.4
Moderately						
1987-88	51.5	20.1	55.2	31.4	52.1	35.1
1989-90	45.2	18.2	49.6	26.1	45.8	29.0
Harmless						
1987-88	7.7	4.0	8.2	4.7	5.7	4.6
1989-90	8.1	4.8	9.1	6.1	6.3	4.6

Table 31 reveals that the percentage of students giving ratings of extremely harmful has increased since the previous survey for both marijuana and alcohol for all grade levels. As in the assessments of parental attitudes, the change varies from slight to moderate, but it is consistently present. By Grade 11, slightly under one-half of the students considered regular use of alcohol to be harmful and two-thirds drew the same conclusion about marijuana.

Sources of knowledge. Students were asked whether they learned about alcohol and about other drugs from any of the following sources: friends, parents, school classes, their own experience, siblings, and movies or television (*Items 49 and 50*). As reported in Table 32, regardless of substance or grade level, the most frequently cited source of information about alcohol and other drugs was school classes. This is true even among 11th-grade students (64%). In contrast, in the 1985-86 survey, friends were named by 11th-grade students more often as the source of knowledge than school classes. Friends were a relatively unimportant source among 7th-graders (only 19%), but rose to the second most important source (48%) by Grade 11. In contrast, parents ranked second among 7th-graders (44%) as a source of information, but were relatively unimportant to most 11th-graders (cited by only 29%). This reflects the growth of peer influences relative to parental influences that occur over the course of adolescence.

Table 32
Sources of Knowledge About Drugs/Alcohol

	Grade 7		Grade 9		Grade 11	
Source	Alcohol (%)	Drugs (%)	Alcohol (%)	Drugs (%)	Alcohol (%)	Drugs (%)
Friends	18.8	18.6	40.8	37.1	50.6	47.7
Parents	44.4	36.9	45.9	34.9	43.9	29.1
School classes	56.0	62.9	55.2	64.0	56.7	64.1
Own experience	10.3	6.5	24.3	12.5	36.9	21.4
Siblings	7.7	7.3	15.5	13.9	17.1	13.3
Movies/TV	37.8	38.3	41.6	45.3	40.1	43.6

Note: In the 1987-88 survey, separate questions referred to alcohol vs. drugs. Because the current survey combines the two, results from 1989-90 are not comparable with those from the previous survey.

Movies and television were a relatively important source of information at all three grade levels, being cited by roughly 4 out of 10 students in each grade. Finally, students' own experience became less important since the initial survey. In the 1985-86 survey, 38% of 11th-grade students cited their own experience as a source of knowledge about alcohol and other drugs, compared with only 21% currently.

Reasons for use. Students in Grades 9 and 11 were asked why most students who used alcohol or other drugs did so. Response options included "getting away from problems," "experimentation," "friends use," "to have fun," and "bored, nothing else to do" (*Item 52*). The "have fun" alternative was a replacement for the "to feel good" response in the 1987-88 survey because the former referred less ambiguously to hedonistic motives. Table 33 shows that this alternative became most frequently selected at Grade 11, although there was little change among 9th-graders.

Among 11th-graders, 60% indicated that students used alcohol or drugs to "feel good." In other words, most older students perceived substance use as a recreational activity. Somewhat more than one-half (55%) endorsed peer pressure or example ("friends use"). About one-half endorsed "get away from problems."

Ninth-grade students were less differentiated in their responses: "to get away from problems" and "friends use" were each endorsed by a little over one-half of the students. The only relatively unpopular alternative at either grade was boredom. Only about one-fifth of 9th- and slightly over one-fourth of 11th-grade students selected this alternative.

The most important change was the drop in the percentage of 9th- and 11th-grade students who cited peer pressure as a reason for substance use. Since the last survey, endorsement rates for this alternative dropped 8% at Grade 9 and 9% at Grade 11, possibly reflecting a change in the perceived peer climate.

Table 33
Reasons Most Kids Use Alcohol or Other Drugs, Grades 9 and 11

Reason	Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
To get away from problems	52.0	52.7	55.3	51.5
To see what it's like	52.0	46.3	55.2	46.3
Because friends use	60.5	53.0	63.6	54.6
To have fun[a]	45.9	43.7	54.4	60.2
Bored, nothing else to do	25.4	18.6	33.7	26.3

[a]Wording changed from "feel good" in 1987-88 to "have fun" in 1989-90.

Reasons for not using. Students at all three grade levels were asked to endorse "good reasons" (any that applied) for not using alcohol or drugs (*Item 54*). Responses included: "might become an addict or alcoholic," "getting into trouble with police or school," "losing close friends who don't approve," "disappointing parents or other adults," and "disappointing yourself because you have chosen not to drink or use drugs." A shorter list of reasons for 7th-grade students included the following options: "become alcoholic or addict," "get into trouble with police or school," "lose close friends," "make parents or other adults angry or sad," and "would not be the kind of person you want to be."

Table 34 shows that the most popular reason for not using alcohol or drugs is that one might become an alcoholic or addict. At Grades 9 and 11, this alternative was endorsed by 8 out of 10 students and at Grade 7, by almost three out of four. As in previous surveys, "disappointing self" was endorsed by the fewest students, especially among 9th- and 11th-graders (34% and 36%, respectively). Other reasons were endorsed by one-half or more students regardless of grade level.

While fear of becoming an alcoholic or addict remains the most popular reason for avoiding alcohol and other drugs, other alternatives have generally dropped in frequency of endorsement since 1987-88. However, there was no particular pattern that might help explain the basis for the declines. "Disappointing self" declined at Grade 7 (from 55% in 1987-88 to 43% currently), but the pattern was not repeated at Grades 9 and 11, where changes were too slight to be interpreted. Thirty-four percent of 9th- and 36% of 11th-grade students in the current

survey indicated that a good reason for not using drugs was disappointing oneself. In the 1985-86 survey, only 25% of 9th- and 30% of 11th-graders endorsed this alternative.

Table 34
Percentage Giving Reasons for Not Using Alcohol or Other Drugs

Reason	Grade 7		Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Become alcoholic or addict	74.6	72.8	79.3	79.2	83.8	80.5
Trouble with police/school	54.9	41.1	59.1	52.7	63.6	55.7
Lose friends who don't approve	51.5	37.9	52.5	45.1	51.7	44.2
Disappoint parents/others	54.3	37.7	60.4	51.4	63.8	52.9
Disappoint self	55.0	42.7	32.9	34.1	38.7	35.9

Availability

Sources of supply. Students were asked, "Where do students at this school who use drugs get them?" (*Item 51*). Response options included: home, other family members (not at home), school, parties and social events outside school, friends outside school, or dealers. An "other, don't know" option was also provided. The responses are summarized in Table 35.

In comparison with 1987-88, most of the sources of drugs were cited less often in the current survey among 9th- and 11th-graders. However, the relative ranking of sources did not change. Among 11th-graders, friends outside of school and parties outside of school remained the most frequently named sources, being selected by about one-half of the current respondents compared with 60% in the previous survey. Friends at school were the third most frequently mentioned source (53% currently). More 9th-graders reported drug dealing as a source of money to buy drugs than did 11th-graders (15% vs. 9%), but one-half as many 9th-graders reported jobs as a monetary source as did 11th-graders (14% vs. 33%). These differences may be related. Ninth-graders have less access to the job market than do 11th-graders and, therefore, may rely more on drug dealing to buy their drugs.

Table 35
Perception of Where Most Drug Users at Schools Get Drugs

Source	Grade 7		Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Home (parents/siblings)	3.3	10.2	12.3	10.0	16.0	11.3
Other family	--	--	10.3	6.4	14.7	8.1
School (friends)	12.2	22.6	42.2	33.4	53.1	40.2
Parties outside school	8.5	19.0	46.6	36.7	59.1	47.7
Friends outside school	14.3	21.0	46.0	35.9	60.1	51.0
Dealers	6.5	15.5	27.8	25.4	42.2	34.8
Don't know	55.2	52.7	40.2	39.2	33.4	31.3

Difficulty of obtaining alcohol. Students in grades 9 and 11 were asked how difficult it was for students in their grade level to obtain alcohol (*Item 30*). Response options varied from "very difficult" to "very easy." The results in Table 36 indicate that approximately one-third of 9th- and one-half of the 11th-grade students reported that it was "very easy" to obtain alcohol in their communities. There appears to have been little change in the perceived availability of alcohol since the 1987-88 survey.

Dealing drugs was identified by only about 10% of drug-using students, but was more common among 9th- than 11th-graders, probably because of less access to money from jobs.

Sources of money. Table 37 summarizes student reports of sources of the money they used to buy alcohol (*Item 25*). An editing error on the senior high version of the questionnaire led to the question asking only about alcohol instead of about both alcohol and drugs. However, it is unlikely that this error had any practical effect on the results, since it seems improbable that students who use both alcohol and drugs would make distinctions about the sources of money that could be used for each. Therefore, these responses can be considered indicative of sources of money for buying either category of substance.

Table 36
Difficulty in Obtaining Alcohol at Students' Grade Level

	Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Very difficult	4.1	6.9	2.8	3.4
Fairly difficult	8.3	7.0	5.1	4.7
Fairly easy	36.3	28.6	36.3	29.9
Very easy	34.0	33.9	46.6	49.3
Don't know	17.2	23.6	9.2	12.6

Response options for the question on sources of money included parents, job outside home, dealing, and other. Parents were the source of money named most frequently regardless of grade level (roughly 4 out of 10 students at each grade). Jobs, not surprisingly, were a more frequent source as students grew older, being cited by one-third of 11th-grade students.

Table 37
Users' Source of Money to Purchase Drugs/Alcohol[a]

	Grade		
Source	7 (%)	9 (%)	11 (%)
Parents	36.7	44.7	40.1
Job outside home	12.2	14.1	32.8
Dealing drugs	11.5	14.5	8.8
Other	39.6	26.7	18.0

[a]The Grade 7 version asked source of money for both alcohol and drugs. The Grades 9-11 version asked source only for drugs.

Prevention and Education

To explore the experience with, and effect of, drug education programs and other prevention efforts, students were asked about their total exposure to prevention, the kinds of prevention activities they experienced, and the effects of these experiences (*Items 55 and 56*). The results are provided in Tables 38-40.

Prevention experience. The last column of Table 38 provides the percentages of 9th- and 11th-graders reporting never having any prevention classes. Only about 10% of students at each grade level reported that they were not involved in any school prevention classes or programs. Table 39 reveals that among 7th-graders, 11% reported that they did not take any drug or alcohol classes, compared with 7% in 1987-88. Table 40 shows that 31.5% of 9th- and 25.1% of 11th-grade students had no involvement in prevention of any kind during the previous year in school.

Benefits of prevention experiences. Separate questions for 7th-graders and for 9th- and 11th-graders were used to assess what students believed they gained (or did not gain) from prevention classes or other activities in school.

For 9th- and 11th-grade students a total of 11 options were provided: "had no prevention education," "reduction of use (alcohol and other drugs)," " resisting social pressure," "health knowledge," "understanding own feelings," "making/keeping friends," "better communication with parents," and "involvement in alternative activities." Two options for no effect were also provided: did not learn anything and decided on one's own not to use alcohol or drugs. Results are presented in Table 38.

Differences between the 1987-88 and current results on these responses were small and revealed no consistent pattern. About 60% of students at both grade levels endorsed "learned that alcohol/drugs are harmful." This has consistently been the most frequently selected alternative. On the other hand, less than 10% of the students said that they did not learn anything from school-based alcohol and drug education. These students are likely to be the same students who indicated that they had no classes or programs in school.

In between the positive and negative extremes, slightly under one-half of the students at both grade levels reported that they learned to avoid or reduce both alcohol and other drug use, with no difference between drug categories. One-third at each grade level credited school programs with helping them learn to resist pressure from peers to drink or use drugs. Finally, about 4 in 10 students reported that they already decided not to use alcohol or drugs and, thus, could not be said to have been influenced by school prevention classes.

Table 38
Effects of Drug/Alcohol Education in Grades 9 and 11

Effects	Grade 9		Grade 11	
	1987-88 (%)	1989-90 (%)	1987-88 (%)	1989-90 (%)
Avoid/reduce alcohol consumption	46.6	45.3	46.9	44.5
Avoid/reduce other drug use	46.0	45.7	45.5	44.6
Resist pressure from others	36.7	35.8	36.4	34.5
Learned alcohol/drugs harmful	55.8	59.9	63.1	62.5
Helped deal with feelings	22.5	23.4	20.6	20.6
Helped me make/keep friends	24.1	24.9	20.8	20.7
Helped me talk with parents	17.3	17.0	14.0	13.8
Get involved in school/community	16.9	16.9	14.9	14.1
Not affected me, learned nothing	9.2	8.0	9.7	7.6
Already decided not to use/drink	40.9	39.8	40.1	38.4
No classes	--	11.8	--	9.5

Seventh-grade students were given a more brief and simple version of the question that was administered to older students. They were asked to indicate whether they learned anything in school classes about any of the following: effects of different drugs, how to say "no" to peers who offer drugs, health effects associated with drug use, how to make decisions promoting personal health and welfare, and alternatives to drugs and alcohol. Two other options also were provided: "denying any personal effects from school prevention" and "no school classes on alcohol or drugs."

Table 39 shows that the alternative checked most frequently was "how to say no" (62%). The second most frequently checked alternative (53%) was "what drugs do to people," which was the most frequently chosen response in 1987-88 (73%). This shift can be seen as reflecting the growth in popularity of peer resistance programs. The only other type of learning checked by more than one-half of the 7th-grade students was "how drugs hurt your body." The current sample of 7th-graders gave lower rates of endorsement to each of the outcomes than did the sample in 1987-88. The reason for this is unclear.

Table 39
Effects of Drug/Alcohol Education in Grade 7

	Grade 7	
Effects	1987-88 (%)	1989-90 (%)
What drugs do to people	72.8	52.6
How to "say no"	68.3	62.4
How drugs hurt your body	66.3	51.0
Help make good decisions	50.1	40.3
Other things to do	38.1	29.8
Has not affected me	6.2	11.9
Had no drug/alcohol classes	6.7	10.6

Types of prevention experience (past year). Table 40 provides the results of a new question asking 9th- and 11th-graders about their participation in various kinds of prevention activities at school during the previous year. Responses included: course lasting a semester, course lasting less than a semester, student activities such as clubs, assemblies or other public events, and other. The purpose of this question was to determine how much contact students actually had with prevention activities. (These results are provided in Table 38.)

Table 40
Prevention Involvement in Grades 9 and 11

	Grade	
Type or level of involvement	9 (%)	11 (%)
Semester course in drugs/alcohol	12.0	11.3
Part semester course in drugs/alcohol	19.6	37.9
Clubs, support groups, campaigns	11.4	11.9
Assemblies or one-time only events	30.9	31.7
Other	10.3	8.2
None	31.5	25.1

Slightly less than one-third of both 9th- (31%) and 11th-graders (32%) reported that their experience with AOD prevention consisted of assemblies and other one-time events. Among 9th-graders, this was the most frequently reported experience. Eleventh-graders most frequently reported taking a less-than-full semester course in prevention (38%), compared with only 20% of 9th-graders. This suggests that more extensive course instruction occurs after 9th-grade. Other prevention activities, including a full semester course, were reported by roughly 10% of students at each grade level.

V. Regional, Ethnic, and Gender Comparisons

Two sets of comparisons between groups were made for each of the three grade levels. The first part of this section compares the average differences between gender, regional, and racial/ethnic groups for the seven most commonly used substances: beer, wine, spirits, cigarettes, marijuana, cocaine, and inhalants (see Tables 41-47). Overall *F* tests were calculated for each of the seven substances at each grade level. These results were followed-up with Tukey's Honestly Significant Difference (HSD) tests. The Tukey HSD is a posteriori contrast test used to compare all possible pairs of group means. Tukey comparisons were calculated for all regional and racial/ethnic groups, at the significance level of $p = .05$.

Tables 41-47 present only those comparisons on substances for which there were statistically significant differences, and only these differences are discussed in the text. While the differences are significant at the .05 level or greater, because of the large sample size the actual magnitude of the difference may not be substantial and the implications should not be over interpreted.

The second part of this section looks at differences in frequency of use by gender and ethnic status between respondents in the current and the 1987-88 surveys for all 18 substances assessed (see Tables 48-49). The scale used in all analyses was: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).

Regional Comparisons

Comparisons between regions are reported in Tables 41-43. Six regions were compared: Central, Inland, Los Angeles, Northern, San Diego, and San Francisco. (Appendix I presents the list of the counties representing each of the six regions of the state.) The results are presented in two columns--high means and low means. The use means for all the regions and corresponding means listed in the high category were significantly different from all those regions to which they are compared in the low category. Regions not listed had mean use values in the middle range of the comparisons, and were *not* found to be significant in the Tukey comparisons.

Although there were differences among the grade levels, overall the data indicated that for those substances for which regional differences were statistically significant, the Northern region tended to report significantly higher usage rates than one or more of the other regions,

most often the Central region; while the Central region tended to report significantly lower usage rates than one or more of the other regions, most often the Northern region. The three large urban regions, Los Angeles, San Diego, and San Francisco, tended to fall in the middle range, indicating no major urban/rural differences.

Seventh-grade students. For 7th-graders, regional differences were found for five of the seven substances--beer, wine, spirits, marijuana, and cigarettes (see Table 41.) For these substances, students in the Northern region reported significantly more use than students in one or more other regions, including the Central region in all cases. Students in the Central region scored lower than one or more other regions in all five comparisons. There was no apparent urban versus small town/rural distinction, because, depending on substance, at least one of the three large urban regions ranked somewhere in the middle.

Table 41
Tukey HSD Comparisons Between Regions for 7th-Grade Students

	Regions			
Substance	High means	Low means	Overall *F*	*df*
Beer	Northern (1.70) San Francisco (1.64)	Central (1.39)	2.54*	5, 1766
Wine	Northern (1.72) Inland (1.68)	Central (1.42)	3.39**	5, 1759
Spirits	Northern (1.40)	Los Angeles (1.23) Central (1.11)	3.83**	5, 1760
Marijuana	Northern (1.29)	San Francisco (1.12) Los Angeles (1.09) Central (1.05)	4.10***	5, 1765
Cigarettes	San Diego (1.40) Northern (1.38)	Central (1.13)	3.98**	5, 1752

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
*$p<.05$. **$p<.01$. ***$p<.001$

Ninth-grade students. At Grade 9 (Table 42), regions differed for six of the seven substances. The pattern is different and more complex than was evident among 7th-graders. The Northern and San Diego regions tended to report significantly higher rates than one or more regions on beer, wine, spirits, and marijuana. For cigarettes, the San Diego region also scored significantly higher than the Los Angeles, San Francisco, and Central regions. For cocaine use, the Central region reported a significantly higher usage rate than the Inland, Northern, and San Francisco regions. This was the only time in which the Central region appeared in the high category in any of the comparisons. It is unclear as to why this finding goes counter to the general pattern for the Central region. Again, at least one of the three urban regions had one or more regions reporting a significantly higher consumption rate on all six substances.

Eleventh-grade students. Among 11th-graders (Table 43), statistically significant differences were found between regions for four of the seven substances--beer, wine, spirits, and marijuana. The Northern region reported higher usage rates than one or more of the regions for each of the four substances, while the San Diego region reported higher usage rates than one or more of the other regions for beer, spirits, and marijuana. For both these regions, the Central area was the most common comparison region at the low end. Los Angeles also had significantly lower mean use than the Northern region for all four substances.

Table 42
Tukey HSD Comparisons between Regions for 9th-Grade Students

	Regions			
Substance	High means	Low means	Overall *F*	*df*
Beer	San Diego (2.35) Northern (2.20) Inland (2.05) Los Angeles (2.01)	San Francisco (1.75)	7.60***	5, 2194
	San Diego (2.35)	Los Angeles (2.01) Central (1.88)		
Wine	Northern (2.24) San Diego (2.17)	Los Angeles (1.87)	5.47***	5, 2194
	Northern (2.24)	San Francisco (1.91) Central (1.88)		
Spirits	Northern (1.92)	Inland (1.64)	10.60***	5, 2185
	San Diego (1.91)	San Francisco (1.61) Central (1.53) Los Angeles (1.48)		
Marijuana	Northern (1.67)	Central (1.36) San Francisco (1.32) Los Angeles (1.31)	7.57***	5, 2183
	San Diego (1.64)	San Francisco (1.32) Los Angeles (1.31)		
	Inland (1.54)	Los Angeles (1.31)		
Cocaine	Central (1.32)	Inland (1.16) Northern (1.05) San Francisco (1.04)	4.04**	5, 2193
Cigarettes	San Diego (1.70)	Los Angeles (1.40) San Francisco (1.38 Central (1.32)	4.61***	5, 2183

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
*$p<.05$. **$p<.01$. ***$p<.001$.

Table 43
Tukey HSD Comparisons between Regions for 11th-Grade Students

	Regions			
Substance	High means	Low means	Overall *F*	*df*
Beer	Northern (2.99)	Inland (2.58) San Francisco (2.45) Los Angeles (2.43) Central (2.13)	7.33***	5, 2285
	San Diego (2.61) Inland (2.58)	Central (2.13)		
Wine	Northern (2.59)	Los Angeles (2.19) San Diego (2.18) Central (2.06) San Francisco (2.02)	6.16***	5, 2277
Spirits	Northern (2.39)	San Diego (2.00) San Francisco (1.96) Inland (1.94) Los Angeles (1.86) Central (1.67)	7.84**	5, 2274
	San Diego (2.00)	Central (1.67)		
Marijuana	Northern (2.04)	Los Angeles (1.57)	7.66***	5, 2282
	San Diego (1.88) San Francisco (1.81)	Central (1.38)		

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
$^{*}p<.05$. $^{**}p<.01$. $^{***}p<.001$.

Ethnic Comparisons

Tables 44-46 present data on the five ethnic groups used in previous surveys (Asian, black, Hispanic, Native American, and white). These groups were reconstructed from a considerably larger set of racial/ethnic classifications, as discussed in Section III. As a result, they are not always identical to the original response categories used in either the 1985-86 or 1987-88 surveys.

For all three grade levels and over all substances, there is a reasonably consistent ranking in frequency of use among the racial/ethnic classifications. Native Americans, white, and Hispanic students reported higher usage rates than one or more of the other racial/ethnic

groups, most often Asians or blacks; while black and Asian students reported lower usage rates than one or more of the other racial/ethnic groups, most often Native Americans, whites, and Hispanics. Similar rankings were apparent in the previous California surveys as well as other multicultural comparisons of drug use among youth.[6] The basis for the ranking is complex. Socioeconomic factors including disadvantage and affluence, differential school dropout rates, family characteristics, and cultural norms are undoubtedly involved.[7]

Seventh-grade. For Grade 7 (see Table 44), statistically significant differences between racial/ethnic groups were present for only three of the seven substances--beer, wine, and spirits. For all three substances, Asians reported a significantly lower usage rate than all of the other racial/ethnic groups, except for blacks for spirits.

Table 44
Tukey HSD Comparisons Between Racial/Ethnic Groups for 7th-Grade Students

	Regions			
Substance	High means	Low means	Overall *F*	*df*
Beer	Hispanic (1.70) Native American (1.65) White (1.60) Black (1.54)	Asian (1.11)	6.98***	5, 1579
Wine	Hispanic (1.70) Native American (1.66) White (1.64) Black (1.54)	Asian (1.16)	6.43***	5, 1573
Spirits	Native American (1.38) White (1.29) Hispanic (1.27)	Asian (1.01)	3.84**	5, 1578

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
*$p<.05$. **$p<.01$. ***$p<.001$.

[6]For overviews of the research on AOD use and its prevention among youth of color, see Austin (1989); Austin and Gilbert (1989); Austin, Prendergast, and Lee (1989); and Prendergast, Austin, Maton, and Baker (1989).

[7]For a preliminary discussion of the role of several of these factors see Skager and Frith (1989).

Ninth-grade. Differences between racial/ethnic groups in Grade 9 (see Table 45) were identified for each substance with the single exception of inhalants. For five of the substances--beer, wine, spirits, marijuana, and cigarettes--Native American, white, and Hispanic students reported higher usage rates than one or more other groups. With regard to cocaine, Hispanic students reported a higher usage rate than Asian students. This was also the only drug Native Americans did not report higher use than at least one other group. It is unclear as to why this finding goes counter to the general pattern for Native American students. Once again, Asian students demonstrated significantly less use, scoring lower than one or more of the racial/ethnic groups on all substances. Black students reported a lower usage rate than one or more of the other racial/ethnic groups for beer, spirits, marijuana, and cigarettes, but were significantly higher users of wine compared to Asians.

Eleventh-grade. Among 11th-graders (see Table 46), differences were found for six of the seven substances--beer, wine, spirits, marijuana, cocaine, and cigarettes. For several substances, Native American, white, and Hispanic students reported more frequent use than one or more of the other groups. As in 9th-grade, the only drug of which Native Americans reported higher use was cocaine. The picture for blacks is more complex, as they generally report higher use compared to Asians but lower use compared to Native Americans and whites.

Table 45
Tukey HSD Comparisons Between Racial/Ethnic Groups for 9th-Grade Students

	Racial/Ethnic Groups			
Substance	High means	Low means	Overall *F*	*df*
Beer	White (2.06)	Asian (1.39)	17.83***	5, 2024
	Hispanic (2.25)	Black (1.63)		
	Native American (2.37)			
Wine	Native American (2.29)	Asian (1.33)	15.74***	5, 2020
	Hispanic (2.12)			
	White (2.10)			
	Black (1.80)			
Spirits	Hispanic (1.69)	Black (1.26)	14.51***	5, 2014
	Native American (1.90)	Asian (1.21)		
	White (1.78)			
Marijuana	Native American (1.75)	Asian (1.05)	10.30***	5, 2013
	Hispanic (1.55)	Black (1.18)		
	White (1.49)	Asian (1.05)		
Cocaine	Hispanic (1.13)	Asian (1.02)	3.44*	5, 2022
Cigarettes	White (1.56)	Asian(1.08)	10.49***	5, 2016
	Hispanic (1.49)	Black (1.17)		
	Native American (1.88)	Asian (1.08)		
		Black (1.17)		
		Hispanic (1.49)		

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
*$p<.05$. **$p<.01$. ***$p<.001$.

Table 46
Tukey HSD Comparisons between Racial/Ethnic Groups for 11th-Grade Students

	Racial/Ethnic Groups			
Substance	High means	Low means	Overall *F*	*df*
Beer	Native American (2.90)	Black (2.06)	39.94***	5, 2160
	White (2.86) Hispanic (2.57)	Asian (1.57)		
	Black (2.06)	Asian (1.57)		
Wine	Hispanic (2.19) Black (1.97)	Asian (1.52)	24.12***	5, 2152
	Native American (2.34)	Asian (1.52)		
	White (2.10)	Black (1.97)		
Spirits	Native American (2.43)	Hispanic (1.84)		
	White (2.21)	Asian (1.28) Black (1.60)		
	Black (1.60) Hispanic (1.84)	Asian (1.28)		
Marijuana	Black (1.99) Hispanic (1.60)	Asian (1.08)	22.27***	5, 2158
	Native American (2.31)	Asian (1.08) Hispanic (1.60) Black (1.99)		
	White (1.95)	Asian (1.08) Hispanic (1.60)		
Cocaine	Hispanic (1.21)	Asian (1.02) Black (1.05)	5.23***	5, 2160
	White (1.15)	Asian (1.02)		
Cigarettes	White (1.80)	Hispanic (1.32)	17.44***	5, 2157
	Native American (1.78)	Black (1.27) Asian (1.25)		

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7). $^{*}p<.05$. $^{**}p<.01$. $^{***}p<.001$.

Gender Comparisons

Mean values on use of the seven most common substances--beer, wine, spirits, marijuana, cocaine, inhalants, and cigarettes--were compared between males and females by grade level, using *t*-tests (see Table 47). Males at one or more grade levels, reported more frequent use than did females for all substances except wine and inhalants. Eleventh-grade females drank more wine, as was true in the 1987-88 survey. Males and females did not differ significantly on inhalants at any grade level. Males at all three grade levels drank more beer and smoked more marijuana than females.

Table 47
Difference Comparisons Between Males and Females

	Grade 7			Grade 9			Grade 11		
	Male *M*	Female *M*	*t*	Male *M*	Female *M*	*t*	Male *M*	Female *M*	*t*
Beer	1.70	1.46	5.33***	2.16	1.88	4.88***	2.73	2.25	7.37***
Wine	1.64	1.55	2.10*	1.99	2.01	-0.25	2.14	2.27	-2.37*
Spirits	1.30	1.20	2.78**	1.66	1.61	1.19	2.02	1.85	3.31***
Marijuana	1.18	1.07	3.62***	1.54	1.35	3.99***	1.81	1.57	4.19***
Cocaine	1.06	1.01	2.76**	1.09	1.08	0.35	1.15	1.13	0.75
Inhalants	1.16	1.14	0.83	1.21	1.16	1.60	1.14	1.15	-0.51
Cigarettes	1.32	1.21	3.09**	1.51	1.42	1.83	1.55	1.55	-0.12

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
*$p<.05$. **$p<.01$. ***$p<.001$.

Gender Trends, 1987-88 and 1989-90

Table 48 presents comparisons, over time, between males and females for all 18 substances assessed in the survey, using schools as the unit of analysis. Comparisons were made between average school means rather than between averages over groups of students. (This was also the case for the overall 1987-88 versus current comparisons presented in Table 4.) These intragender comparisons are thus restricted to only those schools that participated in both surveys.

Table 48
Comparisons Between Males and Females for Schools, 1987-88 vs. 1989-90

	Male			Female		
Substance	Mean 1987-88	Mean 1989-90	*t*-value	Mean 1987-88	Mean 1989-90	*t*-value
Grade 7 (n = 32)						
Wine	1.53	1.69	-2.77**	1.56	1.55	--
Amphetamines	1.02	1.04	-2.18*	1.01	1.01	--
Cigarettes	1.20	1.30	-2.41*	1.26	1.21	--
Grade 9 (n = 31)						
Beer	2.30	2.16	--	2.08	1.85	2.96**
Spirits	1.77	1.66	--	1.74	1.56	2.08*
LSD	1.05	1.05	--	1.05	1.02	2.26*
Mushrooms	1.05	1.10	-2.08*	1.04	1.03	--
Barbiturates	1.04	1.02	--	1.03	1.00	2.83**
Sedatives	1.04	1.03	--	1.01	1.00	2.59*
Tranquilizers	1.06	1.04	--	1.09	1.03	2.24*
PCP	1.03	1.07	-2.05*	1.03	1.05	--
Other Narcotics	1.07	1.04	--	1.07	1.02	2.26*
Grade 11 (n = 35)						
Beer	3.06	2.77	2.95**	2.51	2.35	1.98*
Spirits	2.32	2.02	3.06**	2.07	1.93	--
Hashish	1.25	1.15	2.77**	1.09	1.09	--
Amphetamines	1.29	1.17	2.68*	1.25	1.21	--
Cocaine	1.35	1.17	3.19**	1.21	1.18	--
PCP	1.09	1.05	1.99*	1.03	1.04	--
Other Psychedelics	1.07	1.01	2.22*	1.02	1.02	--

Note. Here n = number of schools. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7). *p<.05. **p<.01. ***p<.001.

Seventh-grade. For 7th-graders, changes occurred for only three substances--wine, amphetamines, and cigarettes -- and only among males. While these findings are inconclusive, all are in the direction of higher use.

Ninth-grade. For 9th-graders, there were two statistically significant changes among males, both in the direction of an increase in use since 1987-88. For males, there was an increase in usage of mushrooms and PCP. Again, the pattern is not clear enough to justify confidence that these results are not merely due to chance. For females, the situation appears to be different. The use of beer, spirits, LSD, barbiturates, sedatives, tranquilizers, and other narcotics declined. This suggests that a significant part of the drop in substance use in Grade 9 can be attributed to lower usage rates among females.

Eleventh-grade. Drops in use of seven substances, including beer, spirits, hashish, amphetamines, cocaine, other psychedelics, and PCP, were registered among 11th-grade males. The only statistically significant decline among females was for beer. Thus, drops in frequency of substance use since 1987-88 at Grade 11 may be attributed primarily to lower levels of use among males.

Ethnic Trends, 1987-88 and 1989-90

Table 49 summarizes comparisons of racial/ethnic groups by grade level, over the last two surveys, for all respondents and all 18 substances.

Asian. Asian students, who generally report the lowest levels of substance use, registered statistically significant drops in the consumption of beer and spirits at Grades 7 and 11. Seventh-grade students also registered declines in the usage of mushrooms and inhalants, while 9th-grade students registered declines in cigarette use. Eleventh-graders registered declines in the consumption of wine, marijuana, cocaine, and LSD.

Blacks. No changes in use in either direction were observed among black students at any grade level. (Because no changes occurred, the data are not presented in Table 49.)

Hispanics. Hispanic students registered an increase in the use of wine and a decrease in the use of inhalants in Grades 7 and 9. The use of PCP also increased among students in Grade 7. In Grade 11, the use of spirits and cigarettes decreased.

Native Americans. No changes in usage rates were recorded for Native American students in Grades 7 or 9. Drops in the use of four substances; however, were registered in Grade 11--beer, spirits, inhalants, and cigarettes.

Whites. In the case of white students, changes occurred at each grade level, with a general increase in use at Grade 7 and a general decrease in use at Grades 9 and 11. For 7th-graders, an increase in the use of marijuana, LSD, and other narcotics was registered. At Grade 9,

however, there was an increase in the use of mushrooms and a decrease in the use of beer, spirits, and barbiturates. At Grade 11, the frequency of use of beer, spirits, and cocaine decreased, while the use of wine increased.

Table 49
Comparisons Between Racial/Ethnic Groups, 1987-88 vs. 1989-90

	Grade 7		Grade 9		Grade 11	
Substance	Mean 1987-88	Mean 1989-90	Mean 1987-88	Mean 1989-90	Mean 1987-88	Mean 1989-90
Asian	(n = 193)	(n = 99)	(n = 261)	(n = 194)	(n = 243)	(n = 237)
Beer	1.26	1.11	1.57	1.44	1.86	1.60
Wine	1.26	1.16	1.49	1.37	1.74	1.56
Spirits	1.12	1.01	1.25	1.21	1.58	1.27
Marijuana	1.03	1.02	1.11	1.06	1.27	1.08
Cocaine	1.01	1.02	1.05	1.02	1.11	1.03
LSD	1.01	1.00	1.02	1.00	1.05	1.00
Mushrooms	1.11	1.02	1.13	1.15	1.16	1.21
Inhalants	1.15	1.05	1.15	1.15	1.18	1.12
Cigarettes	1.08	1.08	1.21	1.10	1.35	1.23
Hispanic	(n = 565)	(n = 480)	(n = 420)	(n = 696)	(n = 420)	(n = 560)
Wine	1.53	1.65	1.83	2.12	2.03	2.16
Spirits	1.29	1.28	1.67	1.67	2.00	1.85
Inhalants	1.22	1.15	1.32	1.21	1.17	1.14
PCP	1.04	1.07	1.06	1.12	1.08	1.06
Cigarettes	1.27	1.29	1.44	1.50	1.50	1.32
Native American	(n = 71)	(n = 73)	(n = 64)	(n = 79)	(n = 49)	(n = 65)
Beer	1.68	1.63	2.66	2.38	3.41	2.76
Spirits	1.25	1.37	2.17	1.82	2.78	2.23
Inahalants	1.27	1.17	1.20	1.22	1.47	1.14
Cigarettes	1.38	1.32	1.61	1.90	2.47	1.69
White	(n = 661)	(n = 669)	(n = 670)	(n = 772)	(n = 999)	(n = 973)
Beer	1.64	1.60	2.37	2.06	3.02	2.85
Wine	1.65	1.69	2.06	2.06	2.34	2.46
Spirits	1.31	1.28	1.92	1.73	2.35	2.20
Marijuana	1.07	1.17	1.52	1.46	2.00	1.94
Cocaine	1.03	1.02	1.08	1.07	1.26	1.14
LSD	1.00	1.03	1.05	1.05	1.15	1.17
Mushrooms	1.06	1.05	1.04	1.09	1.09	1.10
Barbiturates	1.00	1.01	1.03	1.01	1.05	1.07
Other narcotics	1.02	1.05	1.10	1.08	1.18	1.14

(table 49 continued)

	Grade 7	Grade 9	Grade 11
Substance	*t*	*t*	*t*
Asian			
Beer	2.74***	--	2.48*
Wine	--	--	2.00*
Spirits	3.36***	--	3.95***
Marijuana	--	--	2.94**
Cocaine	--	--	2.41*
LSD	--	--	2.47**
Mushrooms	2.01*	--	--
Inhalants	1.99*	--	--
Cigarettes	--	2.06*	--
Hispanic			
Wine	-2.40*	-4.12***	--
Spirits	--	--	2.00*
Inhalants	1.99*	2.36*	--
PCP	--	-2.02*	--
Cigarettes	--	--	2.83**
Native American			
Beer	--	--	2.16*
Spirits	--	--	1.94*
Inahalants	--	--	2.54*
Cigarettes	--	--	2.27*
White			
Beer	--	4.33***	2.37*
Wine	--	--	-2.03*
Spirits	--	2.96**	2.34*
Marijuana	-3.33***	--	--
Cocaine	--	--	4.14***
LSD	-1.99*	--	--
Mushrooms	--	-2.49**	--
Barbiturates	--	2.12*	--
Other narcotics	-2.52**	--	--

Note. Figures in ( ) are the mean values. Mean Values: *no use of a substance in the previous six months* (1), *using once or twice* (2), *using a few times, but less than once per month* (3), *using once a month* (4), *using once a week* (5), *using once a day* (6), and *using more than once a day* (7).
*$p<.05$. **$p<.01$. ***$p<.001$.

VI. Discussion

In this final section, we discuss some of the significant findings as they relate to use trends and influences, major issues involved in drug abuse prevention and reduction, and needs requiring further effort. To this end, the survey findings are examined in the context of current antidrug activities in California.

Use Trends

Many of the survey's findings are encouraging. Reductions of from 1% to 5% were commonly reported for almost all categories of drug use. Although these declines were generally not as great as those between the 1985-86 and 1987-88 surveys, the trend is still in a positive direction. Promising trends include: (a) the first drop in reported alcohol drinking among students in all three grade levels; (b) declines in the percentages of students reporting having been high from alcohol or other drugs and reporting use at school; and (c) increases in both lifetime and current (six-month) abstinence rates and in the numbers viewing regular alcohol and marijuana use as extremely dangerous. These improvements were most evident among 11th-graders, who reported declines in both weekly and daily use of beer and marijuana, the two most popular drugs, as well as in total cocaine and crack use. Since past surveys have shown drug use escalating with age, these reductions among 11th-graders bode well for the future.

As the normative-education component of many prevention curricula emphasizes, most kids do not use drugs other than alcohol. It would now appear that about two-thirds of 11th-graders have never tried an "other" drug. Over the six months before the survey, 81% of 9th- and 72% of 11th-graders were abstinent from marijuana. Also encouraging were the findings indicating that experimentation with drugs other than alcohol (but unfortunately not alcohol) among California youth does not necessarily lead to regular, continuous use. There is considerable fluidity of use, with many youth stopping for long periods. Other drug users were more likely to report that they stopped for at least one year than that they never tried to stop. About the same percentage classified themselves as former users as current users. Similar findings have been reported elsewhere regarding marijuana.[8] Unfortunately, far less attention has been directed to the factors influencing use cessation than use initiation, an oversight that has limited our knowledge of how to reduce use within the user population.

---

[8]On the cessation of marijuana use, see Johnson (1988); Goodstadt, Sheppard, and Chan (1984); and Barrett, Simpson, and Lehman (1988).

Use Influences

What has contributed to this use decline? Since the first state survey, increased emphasis on AOD problems in the media, expansions in school and community prevention programs, and more severe law enforcement policies have contributed to an expectation for continued declines in substance use. Although these expectations were confirmed by the current survey, it was not possible to sort out the relative influence of these or other specific factors on the downward trend.

Particularly valuable in this regard would be research examining changes in survey findings since 1985-86 as they relate to changes in school drug policies and programs. For example, a recent national survey found that the most common explanation provided by school administrators for decreasing student alcohol or drug problems was changes in the schools' discipline policy or increased enforcement of the existing policy.[9] It is possible that harsher school policies regarding drugs instigated in California since the mid-1980s have led to greater numbers of heavier users being expelled from school. This might explain the decline in perceptions of use and sales on campus, as well as the larger use declines among 11th-graders than other grades. However, the state dropout rate actually declined since the first survey, suggesting that expulsions did not played a major role in the use declines, unless the proportion of heavy users among dropouts markedly increased.

It does appear that underlying the decline in use are related changes in peer influences and student attitudes towards drugs. Although the findings continue to reveal the importance of peer influences as a critical factor leading to AOD use as adolescence progresses, they also suggest that this pro-use influence is declining. On the one hand, over one-half of 11th-graders endorsed peer influences as a main reason for use. Friends were also by far the major source of drugs, and the percentage of students citing the loss of friendships as a reason for not using drugs actually declined. On the other hand, major declines occurred in the endorsement of peer pressure as a reason for use among 9th- and 11th-graders. This trend may reflect a change in the peer climate as perceived by students based on the fact that AOD use has dropped.

Also reflecting a possible reduction in peer influences, the percentages of students who indicated "disappointing self" as a reason for not using drugs remained significantly above the 1985-86 levels, although there was only a small increase in the numbers citing this in 9th- and 11th-grades since 1987-88. As an intrinsic reason for avoiding substances, disappointing self

[9]See Moskowitz, and Jones (1988).

is probably a more powerful basis for abstinence and resistance to peer pressure than the *extrinsic* reasons for not using provided in the questionnaire.

The declines in both use and peer influences most probably are related to the increased negativity in respondent attitudes toward AOD use since 1985-86. The message that AOD use is harmful is being heard. Although primary reliance on information dissemination as a means to deter drug use has long been discredited, this California survey suggests that the prevention and education efforts mounted in the state's schools and communities had an effect on these improvements.[10] In all grades, learning about the dangers of drugs and how to avoid/reduce use were the two most frequently cited effects of drug education courses. Among 9th- and 11th-graders, 60% reported that they learned that drugs were harmful from prevention classes. Students also cited classes in school more than peers as the source of their information about drugs, possibly reflecting that school-based education programs are becoming an effective counter to pro-use peer influences. This is consistent with recent evaluations of prevention programs that have found such programs to be effective for the general student population, albeit less for alcohol than for other drugs (see below).[11] It may be that the accumulative effect of their exposure to prevention courses over the years accounts for the greater declines among 11th-graders.

Similarly, analysis of data from the National Institute on Drug Abuse's national survey of drug use among high school seniors suggests that providing rational, balanced information about the adverse effects of drug use can be effective in reducing use.[12] Although much more needs to be done, we appear to be moving in the right direction.

Areas of Concern

Despite the progress that has been made, there is no evidence that alcohol and other drug use is about to disappear among California youth. Only about one-third of 9th-graders and one quarter of 11th-graders were totally abstinent from any AOD use in the six months prior to the survey. One in five 11th-graders was still classified as a high-risk user. Furthermore, there are several areas of concern that need to be addressed in regard to specific populations and drugs. The current survey, as well as the previous ones, illustrate the diversity in drug use within subgroups of California's student population. It has been

---

[10]On the limits of the information-only approach, see Austin (1988).

[11]See Ellickson and Bell (1990).; Hansen, Malotte, and Fielding (1988); and Pentz et al. (1990).

[12]See Bachman et al. (1988).

argued that prevention efforts are failing to meet the needs of many youth because programs were developed largely for the mainstream, middle-class population and treat all youth as if they are the same, rather than addressing subgroup differences. More careful matching of program, as well as drug-using behavior, approaches to target audiences may increase success.

The survey findings indicate that the populations warranting more attention include: high-risk users; ethnic minorities; and users of tobacco, steroids, and, especially, alcohol. There is also a general need to expand prevention and intervention efforts in elementary school and develop more comprehensive programs throughout the school years. Finally, we need to learn and do more about use among school dropouts.

High-risk users. Based in part on the previous findings of this survey, the California Legislative Analyst recently questioned whether "drug abuse prevention strategies that focus primarily on discouraging experimental use are too broadly based in their approach" to affect high-risk populations. The Analyst therefore recommended, "The Legislature [should] give funding priority to programs that target high-risk youth."[13] The findings since 1987-88 support the hypothesis that most adolescents who engage in heavy or high-risk drug use are a distinct population from AOD experimenters requiring more attention.[14] The rise in the number of abstainers and the stability in the number of high-risk users suggest that the overall decline in substance use occurred primarily within the third group of students who were, or otherwise might have become, "conventional" users. This dichotomy between conventional and high-risk users probably also accounts for the rise in the number of students who never saw anyone "high" at school and the stability in the number who saw someone high. The latter group may consist mainly of high-risk users reporting on the behavior of their peers, underscoring the existence of totally separate peer networks.

The persistence of relatively large groups of high-risk or heavy users in Grades 9 and 11 remains a problem for the public agenda. High-risk users appear not to have heard the antidrug messages or to resist or disregard them if they have. It is now evident that experimental, regular, and habitual use have different etiologies and may require different prevention strategies. Most prevention efforts in the 1980s have been limited in their ability to deal with

[13]See California Office of the Legislative Analyst (1990) and Newcomb and Bentler (1988). The latter concluded that because heavy use was part of an integrated lifestyle involving attitudes and other behaviors, a "strict focus on teenage drug use will be too limited for effective prevention or treatment." See also Shedler and Block (1990) who found that problem drug use is a symptom, not a cause, of personal and social maladjustment, and argued that current prevention efforts are misguided in that they focus on symptoms rather than the underlying psychological syndrome.

[14]In a longitudinal survey of 1,634 students in Los Angeles County, similar conclusions were reached. See Newcomb and Bentler (1988).

high-risk youth because they did not take into consideration the differences between the mainstream and high-risk populations. Second, a central component of many programs is social inoculation or peer-pressure resistance, but peer pressure does not appear to be as significant an influence on high-risk users as on mainstream students. Third, program emphasis on the risks of AOD use may be counterproductive with this population because many in it are attracted to risk-taking.[15]

Alternative programs such as sports, recreation, and personal competency activities are an example of the need for differential approaches in dealing with high-risk users. Such programs are not necessarily effective for mainstream youth, but there is evidence that they may be very promising for dealing with high-risk youth. This is probably because they provide these students with a sense of control over some aspects of their lives for the first time.[16]

Finally, we need to improve our ability to differentiate between and identify youth at different levels of risk and to expand our school intervention programs to deal with them. To assist in this effort, the California Department of Alcohol and Drug Programs is now funding and evaluating model school Student Assistance Programs. A California Student Assistance Association of Leadership for Professionals (CALSAP) also was formed.[17]

Minority youth. Another population requiring more targeted prevention efforts are youth of color. In spite of the research into drug use that was conducted since the 1960s, little is still known about the scope and nature of the problem among ethnic minorities, and particularly among their youth.[18] This lack of knowledge poses special problems for California because the state has one of the nation's largest, most diverse, and fastest growing minority populations. Minority groups now constitute over one-half the state's youth population: 31% are Hispanic, 9% black, and 10% other (including Asian, Pacific Islander, and Native American). One-half of the state's population will soon consist of Hispanics and Asians.[19]

---

[15]See Austin (1988).

[16]See Tobler (1986).

[17]For information on SAP developments in the state, contact Ann Bickel, Southwest Regional Laboratory, 4665 Lampson Avenue, Los Alamitos, California 90720.

[18]See note 6. Addressing the substance abuse problems of youth of color is difficult because of the lack of research. Of the data collected on minority populations, significantly more deal with adults than with youth, more with alcohol rather than with other drugs, and more with students than nonstudent youth, and more with males than females.

[19]The predominantly Mexican-American and Asian composition of California's minority population, compared to that of the nation as a whole, is a major challenge to the state in all areas of social services. In 1989, PACE observed that "California's child population is so different from the nation's in size and ethnic diversity that federal social welfare policies are not optimally suited to this state."

This survey, as well as the two prior ones, reveals that overall drug use among youth of color is often no greater and in some cases significantly less than among whites. Yet other research provides evidence of persistent heavy use and use-related problems, and that the lack of prevention, intervention, and treatment services targeting minorities exacerbated these problems. There is a growing consensus that current programs are not serving the needs of minority populations. In an analysis of 127 prevention programs conducted between 1968 and 1977, 70% failed to specify ethnicity and only 3 served populations of more than 50% minority.[20] Even the tobacco programs that have served as the model for most substance abuse curricula were found to be less effective for minorities than for white youth.

We need to develop culturally sensitive and competent programs that target specific minority groups and subgroups. Adolescent minority groups are often isolated from the rest of society and its prevention efforts by cultural, linguistic, geographic, and socioeconomic barriers. The approach, values, and language of mainstream prevention curricula and programs are generally not applicable, relevant, or meaningful to them. A related problem is the common disparity between the prevention and treatment "establishment" and minority communities. Many providers are white professionals who did not receive the training necessary to be culturally sensitive to their clients and to effectively address their group-specific problems.

Because many ethnic groups in California reside in defined neighborhoods, barrios, or reservations, culturally tailored prevention interventions may hold particular promise. But for California's multiethnic communities, developing community-based prevention efforts is a challenge. Such communities may not have the resources to purchase multiple curricula to service each ethnic group represented in their schools. One solution might be to develop more effective, culturally competent means to deliver *existing* generic programs to minorities. It also is evident that school-based education programs are not enough. A high percentage of minority youth are not in school and many of the risk factors they face, especially the adverse socioeconomic conditions of inner-city minorities, are beyond the schools' influence.

Fortunately, recognition of this problem grew markedly since the first survey. On the federal level, promoting prevention among minority groups is a high priority of the Office of Substance Abuse Prevention (OSAP). In California, it is a priority of the state's new California Prevention Resource Center in Oakland, funded by the California Department of Alcohol and Drug Programs, and of the Western Center for Drug-Free Schools and Communities, funded by the U.S. Department of Education. But there are still many

---

[20]See Schaps et al. (1981).

unanswered questions about how to make prevention programs relevant and effective for minorities. To target prevention efforts effectively, much greater understanding is needed about the nature of AOD problems among the state's different ethnic groups. To date, ethnic-specific analyses of the California Student Substance Use Survey have been primarily limited to prevalence data, but the data sets contain a wealth of information for further analyses.

Alcohol use. The current survey findings underscore the need to increase efforts to reduce and prevent future alcohol use among youth. While the decline in respondents' alcohol use since the 1987-88 survey is encouraging, it was not a qualitative change. The improvements in use indicators and attitudes were not as great for alcohol as for other drugs. Alcohol consumption remains the most serious drug problem among youth. For example:

- Alcohol was the drug most used in each grade and the first drug used by the great majority of all youth.
- One-third of 9th- and slightly over one-half of 11th-graders were drunk at least once, making alcohol by far the drug most used for purposes of intoxication.
- For the majority of students in all grades, and overwhelmingly in 7th-grade, alcohol was involved in the circumstance of first other drug use.
- Almost one-quarter of 7th- and 9th-graders and over one-third of 11th-graders were involved in drinking and driving situations.
- Although the perceived harmfulness of alcohol increased, only one-half thought alcohol was very harmful, compared with two-thirds for marijuana.
- Youth were far less likely to stop drinking alcohol than to stop using marijuana.

Alcohol remains the most readily available drug, and parental attitudes toward it are far more ambivalent than toward other drugs:

- There has been little change in the perceived availability of alcohol, with one-third of 9th-graders and a one-half of 11th-graders reporting alcohol to be the easiest drug to obtain.
- Whereas a substantial decline occurred in the percentage of youth who know of adults who used marijuana and cocaine, this was not the case with alcohol.
- Parent attitudes were perceived as being far more critical of marijuana than of alcohol use. This was also reflected in the much higher percentage of adults reportedly aware of their child's alcohol use compared with those aware of their child's marijuana use.
- Parents were identified as the most frequent source of money to buy alcohol and other drugs.

Given this situation, it is not surprising that prevention programs have been far less successful in reducing the use of alcohol than tobacco, marijuana, and other drugs. Environmental prevention researchers argue that underlying this failure are the inability of school-based efforts to overcome the lack of consensus in our society in regard to alcohol use and the many pro-use factors that exist outside the control of the school. Recent research suggests that the goals of alcohol education programs may be too complex and that the positive effects of these programs are still unable to overcome the many use influences outside the classroom.[21] Until we address the widespread, easy availability of alcohol and the inconsistencies between our attitudes toward alcohol and toward other drugs, it is doubtful the major improvements in use among youth will be forthcoming.

Another development that needs close monitoring is the changes in beverage preferences. Wine consumption actually pulled marginally ahead of beer in Grades 7 and 9 and was only slightly behind beer in Grade 11. Although in each grade level wine drinking was still below 1985-86 levels, this increase in popularity since 1987-88 may reflect the growing popularity of wine coolers among youth. However, the implications for this change in regard to overall alcohol use and its prevention remain uncertain.

Tobacco and steroid use. There also was little change in tobacco and steroid use. The declines in cigarette use reported occurred among those reporting experimentation, not daily use. This suggests that we were more successful in prevention than intervention efforts. However, greater declines may occur in the near future in response to new state initiatives directed against these drugs. The California Department of Education made steroid use a priority in its *Healthy Kids, Healthy California* program and established a Tobacco Use Prevention Education (TUPE) program. The latter is only one component of the state's new comprehensive antitobacco effort funded by the Tobacco Tax Initiative (Proposition 99).

The need for early education and intervention. Most youth antidrug programs have been targeted at the junior high school level, particularly the critical 7th-grade transition period. Although overall use among 7th-graders in this survey was too low to draw many conclusions, the extent to which they already had AOD experiences warrants concerted prevention and intervention efforts at the elementary (K-6) level. Among the 7th-graders in this sample, the following was reported: (a) 50% tried alcohol; (b) 23% were in a car while drinking was occurring; (c) 7% tried marijuana; (d) 10% indulged in polydrug use, 4% three or more times; (e) 4% were high at school; (f) 13% were intoxicated at least once from alcohol and 7% from

---

[21]For example, see Bruvold (1988); Ellickson and Bell (1990); Hansen, Malotte, and Fielding (1988); Hopkins, Mauss, Kearney, and Weisheit (1988); Lohrmann and Fors (1986); Mauss, Hopkins, Weisheit, and Kearney (1988); and Moskowitz (1989).

other drugs; and (g) there was a decline in the percentages of students believing their friends would never use marijuana and a rise in those saying they don't know if their friends would.

Research supports the need to forestall use in the elementary years by showing that the greater the involvement in alcohol use in these years, the greater the risk of later use of other drugs. Furthermore, young people who begin AOD use prior to the 7th-grade, compared with those who begin later, are more likely to become more heavily involved in drug use (as well as other deviant activities) and are less likely to discontinue use.[22]

Three other factors that argue for expanding prevention and intervention programs in the elementary years are the number of youth impacted, the intensity of exposure, and the audiences' receptivity to the message. First, during the pre-teen years, virtually all of the age group is present in school, unlike during the later years when increasing percentages of youth drop out. Second, positive prevention outcomes were found to be related to the intensity and length of exposure. Third, it is important to reinforce the more negative attitudes toward drugs that naturally exist in the early ages and to instill into preteens the decision-making, coping, and resistance skills that will help them to withstand pro-use pressures.

In this regard, two disturbing findings were the decline in the number of 7th-graders reporting that drug education had a positive effect (e.g., taught them to "say no" to drugs) and the increases in those reporting no effect or not having a course. The reasons for this are unclear, especially since, in the current survey, learning to "say no" was the most important effect of prevention courses that 7th-graders reported receiving. These disconcerting findings may reflect a lessening of elementary prevention efforts over the previous two years. Fortunately, prevention efforts at the elementary level are now rapidly expanding throughout the state, especially due to the Comprehensive Alcohol and Drug Prevention Education (CADPE) program of the Office of Criminal Justice Planning. Elementary Student Assistance Programs are also being developed.

The need for more comprehensive programs. The survey findings raise the broader issue of whether prevention efforts in California have been too limited. Research demonstrates that one-time interventions are futile and that the most effective prevention programs are intense and comprehensive.[23] As observed, it may well be that one reason that the most substantial improvements occurred among 11th-graders was the accumulated effect of more years of exposure to prevention. Still, about one-third of 9th- and 11th-graders reported that their contact with prevention activities was limited to one-time events, such as assemblies. This

---

[22]This is stressed in several of the chapters in Jones and Battjes (1985). See also: Dielman et al. (1986).

[23]See Benard, Fafoglia, and Perone (1987); DiCiccio et al. (1984); and Weisheit (1983).

would suggest that we need to expand efforts to have more continuous, long-term, and intensive programs from elementary school through the end of high school. Recent guidelines issued by the California Department of Education stress the need for comprehensive, integrated prevention and intervention programs that address the underlying risk factors in the family, school, peer, and community systems of influence.[24]

Use among dropouts and chronic absentees. As hopeful as these findings are, it must be remembered that the survey did not include school-age youth no longer in school. Therefore, the findings for 11th-grade are probably an underestimation of the extent of use among the state's total youth population. A major limitation of our understanding of the phenomenon of AOD use among youth in general is the lack of data about the dropout population; almost all adolescent drug surveys in the United States were conducted on the typical school population. Yet it is evident that unemployed, nonstudent teenagers and/or school dropouts have substantially higher rates of substance use than in-school peers. Furthermore, research documented a correlation between school absenteeism and drug use.[25] In California, although the dropout rate has been declining since 1986, one in five students from the class of 1989 failed to graduate, with rates even higher among minority populations.

The need for community-wide efforts. A consistent implication of the finding in regard to AOD use prevention and reduction is that schools alone cannot do the job, especially in regard to high-risk users, youth of color, alcohol consumers, and dropouts. Successful interventions and prevention programs must involve the entire community.[26] Among the many current California efforts to promote school, community, and law enforcement linkages is the Office of the Attorney General's Challenge Seminar Program.[27]

Conclusion

Although there is much that we still need to know about AOD use among California's youth, the three California Student Substance Use Surveys conducted since 1985-86 have produced a wealth of data to assist in monitoring, understanding, and dealing with the phenomenon of AOD use among the great majority of our state's youth. Those who have

---

[24]See California Department of Education (1990).

[25]See Clayton and Voss (1982); Johnston, Bachman, and O'Malley (1989); and Mensch and Kandel (1988).

[26]See California Department of Education (1990).

[27]For information on the Challenge Seminars, contact the Crime Prevention Center, Office of the Attorney General, P.O.Box 944255, Sacramento, CA 94244-2550.)

worked to reduce AOD use can be heartened by these findings. The challenge we face for the future is to better determine the factors that have promoted these declines and to identify approaches that will bring about further improvements.

Further analysis of survey findings should help in this effort and in the resolution of many of the questions raised in this report. Five specific questions warrant further investigation. First, what are the correlates of nonuse, use, and use cessation? Second, how are demographic variables (e.g., ethnicity) and levels of use related to attitudes and prevention exposure? Only the prevalence data from the state survey was analyzed by ethnicity. Third, what is the relationship between AOD abuse and other problem behavior? The questionnaire includes several items dealing with other problem behavior, analysis of which in 1987-88 revealed that involvement in other problem behaviors may be predictive of later drug abuse. Fourth, how has use been affected by changes in school policies and programs. Here more detailed local surveys of AOD use and prevention efforts are needed. Fifth, what is the level of use among nonstudent youth? More detailed analysis of the continuation school student data in this survey would be valuable since many continuation school students are at high-risk of becoming dropouts.

The complete data sets for all three surveys are available for researchers interested in analyzing these and other questions. Researchers should contact the Office of the Attorney General's Crime Prevention Center, P.O. Box 944255, Sacramento, CA 94244.

VII. References

Austin, G. (1988). *Prevention research update one: Prevention goals, methods, and outcomes*. Portland, OR, and Los Alamitos and San Francisco, CA: Western Center for Drug-Free Schools and Communities.

Austin, G. (1989, winter). *Prevention research update two: Substance abuse among minority youth: Native Americans*. Western Center for Drug-Free Schools and Communities. Portland, OR, and Los Alamitos and San Francisco, CA: Western Center for Drug-Free Schools and Communities.

Austin, G., & Gilbert, J. (1989, spring). *Prevention research update three: Substance abuse among Latino youth*. Portland, OR, and Los Alamitos and San Francisco, CA: Western Center for Drug-Free Schools and Communities.

Austin, G., Prendergast, M., & Lee, H. (1989, winter). *Prevention research update four: Substance abuse among Asian American youth*. Portland, OR, and Los Alamitos and San Francisco, CA: Western Center for Drug-Free Schools and Communities.

Bachman, J. G., Johnston, L.D., O'Malley, P., & Humphrey, R. (1988, March). Explaining the recent decline in marijuana use: Differentiating the effects of perceived risks, disapproval, and general lifestyle factors. *Journal of Health and Social Behavior, 29*(1), 92-112.

Barrett, M., Simpson, D., & Lehman, W. (1988). Behavioral changes of adolescents in drug abuse intervention programs. *Journal of Clinical Psychology, 44*(3), 461-473.

Benard, B., Fafoglia, B., & Perone, J. (1987, February). Knowing what to do--and not to do--reinvigorates drug education. *ASCD Curriculum Update*.

Bruvold, W. (1988, spring). Issues in alcohol education and research. *Contemporary Drug Problems, 15*(1), 21-29.

California Department of Education. (1990). *Not schools alone: Guidelines for schools and communities to prevent the use of tobacco, alcohol, and other drugs among children and youth (Draft)*. Sacramento, CA: author.

California Office of the Legislative Analyst. (1990). *A series of drug-related pieces: Drug use in California; Anti-drug programs in California; Drug prevention programs*. Sacramento, CA: author.

Clayton, R.R., & Voss, H.R. (1982). *Technical review on drug abuse and dropouts*. Report on a NIDA technical review meeting. Rockville, MD: NIDA.

DiCiccio, L., et al. (1984). Evaluation of CASPAR Alcohol Education Curriculum. *Journal of Studies on Alcohol, 45*(2), 160-169.

Dielman, T., et al. (1986). Prevention of adolescent alcohol misuse: An elementary school program. *Journal of Pediatric Psychology, 11*, 259-282.

Ellickson, P., & Bell, R. (1990). Drug prevention in junior high: A multi-site longitudinal test. *Science, 24*, 1265-1272.

Friedman, A.S., Glickman, N., & Utada, A. (1985). Does drug and alcohol use lead to failure to graduate from high school? *Journal of Drug Education, 15*(4), 353-364.

Goodstadt, M.S. (1986). School-based drug education in North America: What is wrong? What can be done? *Journal of School Health, 56*, 278-281.

Goodstadt, M., Sheppard, M., & Chan, G. (1984). Non-use and cessation of cannabis use: Neglected foci of drug education. *Addictive Behavior, 9*, 21-31.

Hansen, W.B., Malotte, C., & Fielding, J. (1988). Evaluation of a tobacco and alcohol abuse prevention curriculum for adolescents. *Health Education Quarterly, 15*, 93-114.

Hopkins, R., Mauss, A., Kearney, K, & Weisheit, R. (1988). Comprehensive evaluation of a model alcohol education curriculum. *Journal of Studies on Alcohol, 49*(1), 38-50.

Jones, C.J., and Battjes, R.J., (Eds.). (1985). *Etiology of Drug Abuse: Implications for prevention*. NIDA Research Monograph 56. Washington, D.C.: US GPO.

Johnston, L., Bachman, J. G., & O'Malley, P. M. (1989). Why do the nation's students use drugs and alcohol: Self-reported reasons from nine national surveys. *Journal of Drug Issues, 16*, 29-66.

Lohrmann, D. K., & Fors, S. (1986). Can school-based educational programs really be expected to solve the adolescent drug abuse problem? *Journal of Drug Education 16*(4), 327-329.

Mauss, A., Hopkins, R., Weisheit, R., & Kearney, K. (1988). The problematic prospects for prevention in the classroom: Should alcohol education programs be expected to reduced drinking by youth? *Journal of Studies on Alcohol, 49*(1), 51-61.

Mensch, B., & Kandel, D. (1988). Dropping out of high school and drug involvement. *Sociology of Education, 61*, 95-113.

Moskowitz, J. (1989). The primary prevention of alcohol problems: A critical review of the research literature. *Journal of Studies on Alcohol, 50*(1), 54-88.

Moskowitz, J., & Jones, R. (1988). Alcohol and drug problems in the schools: Results of a national survey of school administrators. *Journal of Studies on Alcohol, 49*(4), 299-305.

Newcomb, M., & Bentler, P. (1988). *Consequences of adolescent drug use: Impact on the lives of young adults*. Newbury Park, CA: Sage Publications.

Pentz, M. A., et al. (1990). A multicommunity trial for primary prevention of adolescent drug abuse. *Journal of the American Medical Association, 261*(22), 3259-3266.

Policy Analysis for California Education. (1989). *Conditions of children in California*. Berkeley, CA: School of Education, University of California.

Prendergast, M., Austin, G., Maton, K., & Baker, R. (1989, fall). *Prevention research update four: Substance abuse among black youth*. Portland, OR, and Los Alamitos and San Francisco, CA: Western Center for Drug-Free Schools and Communities.

Robins, L, & Przybeck, T. (1985). Age of onset of drug use as a factor in drug and other disorders. In: Jones, C.J., & Battjes, R.J., (Eds.). *Etiology of drug abuse: Implications for prevention*. NIDA Research Monograph 56. Washington, D.C.: US GPO, 178-193.

Schaps, Eric, et al. (1981). Primary prevention evaluation research: A review of 127 impact studies. *Journal of Drug Issues, 11*, 17-43.

Shedler, J., & Block, J. (1990). Adolescent drug use and psychological health: A longitudinal inquiry. *American Psychologist, 45*, 612-630.

Skager, R., & Frith, S. (1989). *Identifying high-risk substance users in grades 9 and 11: A report based on the 1978-88 California substance use survey*. Sacramento, CA: Office of the Attorney General.

Skager, R., Fisher, D. G., & Maddahian, E. (1986). *A statewide survey of drug and alcohol use among California Students in grades 7, 9, and 11, Winter 1985-86*. Sacramento, CA: Office of the Attorney General.

Skager, R., Frith, S. L., & Maddahian, E. (1989). *A statewide survey of drug and alcohol use among California students in grades 7, 9, and 11, Winter 1987-88*. Sacramento, CA: Office of the Attorney General.

Tobler, N.S. (1986). Meta-analyais of 143 adolescent drug prevention programs. *Journal of Drug Issues, 16*(4), 537-567.

Weisheit, R. (1983). The social context of alcohol and drug education: Implications for program evaluations. *Journal of Alcohol and Drug Education 29*(1), 72ff.

Appendix I. Counties By Region

Region I - San Francisco

Counties:
- Alameda
- Contra Costa
- Marin
- San Francisco
- San Mateo
- Santa Clara

Region II - Los Angeles County

Region III - San Diego County

Region IV - Northern

Counties:
- Alpine
- Butte
- Colusa
- Del Norte
- El Dorado
- Glenn
- Humboldt
- Lake
- Lassen
- Mendocino
- Modoc
- Napa
- Nevada
- Placer
- Plumas
- Sacramento
- Shasta
- Sierra
- Siskiyou
- Solano
- Sonoma
- Sutter
- Tehama
- Trinity
- Yolo
- Yuba

Region V - Inland/Southern

Counties:
- Imperial
- Orange
- Riverside
- San Bernardino

Region VI - Central

Counties:
- Amador
- Calaveras
- Fresno
- Inyo
- Kern
- Kings
- Madera
- Mariposa
- Merced
- Mono
- Monterey
- San Benito
- San Joaquin
- San Luis Obispo
- Santa Barbara
- Santa Cruz
- Stanislaus
- Tulare
- Tuolomne
- Ventura

Appendix II Administration Guidelines

1989-90 CALIFORNIA STUDENT SUBSTANCE USE SURVEY

This appendix contains the instructions sent by the Southwest Regional Laboratory to each school about selecting the sample and administering the questionnaire.

I. DRAWING YOUR SCHOOL SAMPLE

It is very important that the guidelines for sample selection be consistently followed at all sites to insure the validity of the survey results.

The number of students to be assessed at your school is indicated in the enclosed packing slip. This is an approximate number and allows for a small discrepancy of 10% or less between the number assessed and the number specified. This will be corrected when we compile the statewide results and weight each school on the basis of its enrollment.

Your student sampling must be randomly drawn and include only English-speaking students at each grade level. To achieve a random sampling, you should follow these procedures:

(1) Divide the total enrollment of English-speaking students at each grade level by the number to be assessed at that grade level. Round the resulting number off to the nearest integer.

(2) Use the number derived in Step 1 to count off the students on the grade-level roster until the total number to be included in the sample has been reached.

Please use the procedure just described rather than randomly selecting intact classrooms. Students are rarely assigned randomly to classrooms. Samples which result, especially where the total number of cases per school is quite small (as is the case for this survey), are usually biased in some way.

II. NOTIFYING STUDENTS AND PARENTS

Both students and parents should be provided with information explaining the purpose of the survey and stressing the anonymity of participants. The following is a sample letter addressed to parents. Similar letters have been used in previous surveys conducted at the district or county level. If you decide to use this letter, you can just paste it onto your letterhead and copy it. However, please feel free to modify the text in any way you deem appropriate.

MODEL LETTER TO PARENTS OF SAMPLE STUDENTS

Dear Parents:

Our school has been selected to participate in the third biennial statewide survey to assess drug and alcohol use among students in grades 7, 9, and 11. The survey is being administered throughout the state to nearly 8,000 students in 100 schools. It is sponsored by Attorney General John K. Van de Kamp in support of his effort to increase the effectiveness of drug and alcohol abuse prevention and law enforcement programs. The goal is to determine whether or not there have been any changes in drug and alcohol use and various influences which affect such use.

Your son or daughter has been selected at random to participate in the survey. These are the facts about it:

1) It is anonymous. Participating students will not put their names or any other identifying information on the questionnaire. No one will be able to connect any individual student with his or her responses.

2) Participating in the survey is voluntary. Your son/daughter may decline to participate without having to give a reason.

3) Results of the statewide survey will be publicized in the same manner as public opinion polls.

The survey results will help answer the vital question of whether or not we are making any progress in the effort to prevent drug and alcohol use among children of our state.

We know that you support efforts to combat the problem of drug and alcohol use by our youth and hope you will agree that this survey represents a vital element in that struggle.

Sincerely,

III. ADMINISTERING THE QUESTIONNAIRE

1. The Setting

Previous experience plus the sampling method described strongly suggest that the assessment be conducted **outside of the regular classroom**. Rooms large enough to allow for assessment of the entire sample for each grade level are appropriate as long as they are not crowded.

The survey should take about 20-30 minutes for the students to complete. Approximately 50-60 minutes should be allowed for the testing period although there should not be a time limit on the questionnaire. Students can be kept together as a group

or allowed to leave individually upon completion of the questionnaire and return to their normal classroom. Past experience indicates that the latter works very effectively.

2. Instructions for Students

Students should be assured by appropriate authority that the survey is important. This is ordinarily done **by the principal** at the beginning of the assessment. Please make sure that you or the principal make the following statements prior to administering the survey.

a. "You have been selected randomly to be among 8,000 students across the state to participate in the 1989-90 *California Student Substance Use Survey*. This is the third time this survey has been administered. Drug and alcohol abuse by young people is of grave concern to both school and community. Through this survey we are able to monitor use trends within the state."

b. "It is very important that you respond honestly and accurately. The survey is anonymous and confidential. No one will ever be able to connect you with your responses. We are not interested in information about individuals but only about use among students as a group. This information is very important. Results of the survey will receive considerable attention in the media, and school and governmental alcohol and drug programs are likely to be influenced by the results. Your cooperation is crucial."

c. "Anyone who does not wish to participate, or who does not want to answer the questionnaire in a serious manner, should leave the room and return to his or her regular classroom. This will in no way be held against you."

d. "In this survey, the word 'drug' does not include *alcohol, tobacco, or steroids.* When information is desired about your use of alcohol, tobacco, or steroids, this will be specifically requested. For example, a question might ask about your attitudes toward 'alcohol and other drugs.' Are there any questions regarding this?"

e. "When you have completed the questionnaire, put it in the box near the entrance to this room and return to your regular classroom." (See below note on collection of instruments)

3. Distribution of the Questionnaires

There are two versions of the questionnaires: one for 7th-grade (yellow) and one for the 9th- and 11th-grades (white).

4. Staff Supervision of Survey Administration

It is vital that students feel confident that their responses will not be observed by other students or proctors; that is, staff members should be present but they should remain an appropriate distance from the students completing the survey. **Confidentiality must be maintained throughout so that students will respond honestly and the results will be accurate.**

5. Collection of the Completed Questionnaires

An effective (and obviously anonymous) means for collecting the completed questionnaires is to put a large box near the entrance to the assessment room. Students should be asked to drop their completed questionnaires into the box when finished. Not having to pass the questionnaire to anyone else assures anonymity.

6. Returning the Completed Questionnaires

After the surveys are administered, bring them to the principal's office and mail them back to SWRL. A prepaid return mailing label has been provided. If your school assessed more than one grade, please *batch the questionnaires by grade level.* We would appreciate your informing us by phone that the survey has been completed.

Your assistance in this important effort is greatly appreciated,

Rodney Skager, Survey Director
Gregory Austin, Project Director

Appendix III. Questionnaires

California Substance Use Survey, Fall 1989

This is a survey of what you know about the use of drugs and alcohol. You are not to give your name or identify yourself in any other way. This survey is voluntary. You do not have to complete this survey, but we hope that you will decide to do so.

If you have decided to participate, please fill in the following information:

Name of your School: _____

Your school grade level (check one): 9th ____ 10th ____ 11th ____ 12th ____

Age (in years) ____ Sex (check one): Male ____(1) Female ____(2)

Which racial or ethnic group do you identify with? (check one only):

___ (1) Black (non-Hispanic)

___ (2) White (non-Hispanic)

___ (3) Native American

Hispanic Groups

___ (4) Mexican/Mexican American

___ (5) Central or South American

___ (6) Other Hispanic

___ (7) Cuban

___ (8) Puerto Rican

Asian and Pacific Islander Groups

___ (9) Chinese

___ (10) Filipino

___ (11) Korean

___ (12) Southeast Asian

___ (13) Asian Indian

___ (14) Japanese

___ (15) Pacific Islander

OTHER:

___ (16) _____

Were you born in this country? (check one) Yes ____(1) No ____ (2)

Copyright, Rodney Skager, 1981, 1985

For questions 1-17, please circle only one answer for each question. Use the following scale:

How often did you use these kinds of substances without a doctor's orders in the last six months?	Never	Once or twice	A Few times	Once a month	Once a week	Once a day	More than once a day
1. beer	1	2	3	4	5	6	7
2. wine (including wine coolers)	1	2	3	4	5	6	7
3. liquor (whiskey, vodka, gin, etc.)	1	2	3	4	5	6	7
4. marijuana (grass, pot, weed, sins, bud, etc.)	1	2	3	4	5	6	7
5. hashish (hash, hash oil, etc.)	1	2	3	4	5	6	7
6. methamphetamines or amphetamines (crank, speed, meth, crystal, bennies, black beauties, Ritalin, ice, etc.)	1	2	3	4	5	6	7
7. cocaine (coke, rock, base, snort, snow, crack, flake)	1	2	3	4	5	6	7
8. LSD (acid, windowpane, blotter)	1	2	3	4	5	6	7
9. mushrooms (fungus, shrooms)	1	2	3	4	5	6	7

	Never	Once or twice	A Few times	Once a month	Once a week	Once a day	More than once a day
10. other psychedelics (mescaline, peyote, MDA, MDMA, ecstasy, adam, EXTC)	1	2	3	4	5	6	7
11. barbiturates (barbs, reds, yellows, Nembutal, Seconal, Amytal)	1	2	3	4	5	6	7
12. sedatives (Quaaludes, ludes, sopers, Doriden)	1	2	3	4	5	6	7
13. tranquilizers (Valium, Librium, Thorazine, Miltown, etc.)	1	2	3	4	5	6	7
14. inhalants (sniffing glue, paint, butane, gasoline, amyl nitrate, rush, poppers)	1	2	3	4	5	6	7
15. PCP (angel dust, juice, wack, sherm, super cool)	1	2	3	4	5	6	7
16. heroin (smack, china white, tar, goma, brown)	1	2	3	4	5	6	7
17. other narcotics (codeine, morphine, opium, Demerol, Percodan)	1	2	3	4	5	6	7

For the rest of the questions, the word "drug" means any of the drugs in (4)-(17) above (not alcohol, steroids, etc.).

18. In the last six months how often did you use more than one substance on the same occasion, for example, beer with marijuana or booze and pills, etc.? Put a check ( ) next to the answer that is closest to your own use.

____ (1) never did/don't use

____ (2) used more than one substance once or twice.

____ (3) used more than one a few times (3 to 6 occasions).

____ (4) used more than one several times (7 to 10 occasions).

____ (5) used more than one often (more than 10 occasions).

19. Have you *ever* used crack, freebase, rock, rush, supercoke, or gravel?

____ (1) no, never

____ (2) once or twice

____ (3) 3 to 6 times

____ (4) 7 to 10 times

____ (5) more than 10 times

20. About how old were you the first time you tried alcohol (beer, wine, or hard liquor)?

____ age ____ never did

21. About how old were you the first time you felt high or intoxicated from any kind of alcohol?

____ age ____ never did

22. About how old were you the first time you tried a drug (not alcohol) such as marijuana, speed, etc.?

____ age ____ never did

23. About how old were you the first time you got high or loaded from a drug such as marijuana or speed?

____ age ____ never did

For questions 24-35, continue checking only one answer for each question:

24. The first substance I got high or intoxicated on was _____ (check only one answer).

____ (1) never been high or intoxicated.

____ (2) alcohol (beer, wine, liquor, etc.)

____ (3) marijuana or hashish (grass, weed, hash)

____ (4) cocaine/crack

____ (5) methamphetamine/amphetamine

____ (6) inhalants (glue, paint, rush, etc.)

____ (7) other

25. If you have ever bought drugs (marijuana, pills, etc.), where did the money you used come from?

____ (1) never have purchased any drugs

____ (2) from parents (such as allowance or pay for work at home)

____ (3) from my job outside my home

____ (4) from dealing drugs

____ (5) other

26. Where were you the first time you tried a drug (not alcohol)?

____ (1) have never used drugs

____ (2) with friends at a party

____ (3) with friends in a car

____ (4) at a public event (concert, game, dance, etc.)

____ (5) at school during regular school day

____ (6) at home with friends or family member(s)

____ (7) alone (at home or elsewhere)

____ (8) other

27. The first time you used a drug, did you start by drinking alcohol (beer, wine, liquor, etc.) beforehand?

_____ (1) have never used drugs

_____ (2) no, did not drink alcohol first

_____ (3) yes, a little (one beer or one glass of wine or wine cooler or one drink of vodka, whisky, gin etc.)

_____ (4) yes, a couple (2 beers, etc.)

_____ (5) yes, quite a bit (3 or more beers, etc.)

28. If you have drunk alcohol (beer, coolers, etc.) at home or elsewhere, do you think your parents know about it?

_____ (1) I have never used alcohol

_____ (2) sure that they do not know

_____ (3) think that they do not know

_____ (4) not sure whether they know or not

_____ (5) think that they do know

_____ (6) sure that they do know

29. If you have used a drug other than alcohol at home or elsewhere, do you think your parents know about it?

_____ (1) I have never used drugs

_____ (2) sure that they do not know

_____ (3) think that they do not know

_____ (4) not sure whether they know or not

_____ (5) think that they do know

_____ (6) sure that they do know

30. How difficult is it for kids in your grade level to get alcohol (beer, wine, etc.) if they really want it?

_____ (1) very difficult

_____ (2) fairly difficult

_____ (3) fairly easy

_____ (4) very easy

_____ (5) don't know

31. In the last year or so, how often have you noticed that another student came to class high from alcohol or other drugs?

____ (1) never

____ (2) rarely, once or twice a year at most

____ (3) sometimes, about once a month

____ (4) about once a week

____ (5) every day

____ (6) don't know

32. Have you ever been high at school on alcohol or a drug like marijuana, pills, speed, etc.?

____ (1) never

____ (2) once or twice

____ (3) 3-6 times

____ (4) more than 6 times

33. Have you ever driven a car when you were drinking or been in a car with friends who were drinking and driving?

____ (1) never

____ (2) once or twice

____ (3) 3-6 times

____ (4) more than 6 times

34. Did you drink alcohol (beer, wine, etc.) in the past, but later decide to stop completely?

____ (1) no, I never drank alcohol

____ (2) no, I still drink at least occasionally

____ (3) yes, but I started drinking again after less than one year

____ (4) yes, and I did not drink any alcohol for the last year

35. Did you use drugs (such as marijuana, amphetamines, etc.) in the past, but later decide to stop completely and manage to do so for at least the last year?

____ (1) no, I never use any drugs

____ (2) no, I still use drugs at least occasionally

____ (3) yes, but I started using again

____ (4) yes, but it has not been a whole year yet

____ (5) yes, and I have not used for the last year

For questions 36-39, please circle one answer for each question.

How many adults do you know who use–		None	Some	Many	Most	All
36.	alcohol (beer, wine, or liquor) (at least once a week	1	2	3	4	5
37.	marijuana or hashish (within the past year)	1	2	3	4	5
38	cocaine (within the past year)	1	2	3	4	5
39.	pills (diet pills, sleeping pills, tranquilizers) (at least once a week)	1	2	3	4	5

For questions 40-48 check only one answer for each question.

40. What would your 4 to 5 best friends think about another student who usually gets loaded on alcohol or other drugs at parties (and acts that way)?

____ (1) would avoid, see as unhealthy or unfortunate

____ (2) would tolerate, but not be particularly friendly towards

____ (3) would see as OK and sometimes join in with that person

____ (4) my friends are pretty much like that student as far as drug and alcohol use is concerned

41. What would your 4 or 5 best friends think about another student who uses alcohol or other drugs at parties or with friends on a regular basis, but who rarely gets obviously loaded or causes any problems?

____ (1) would avoid, see as unhealthy or unfortunate

____ (2) would tolerate, but not be particularly friendly towards

____ (3) would see as OK and sometimes join in with that person

____ (4) my friends are pretty much like that student as far as drug and alcohol use is concerned

42. I think frequent (daily or almost daily) use of marijuana is. . .

____ (1) extremely harmful

____ (2) harmful

____ (3) somewhat harmful

____ (4) mainly harmless

____ (5) harmless

43. In my opinion, frequent (daily or almost daily) use of alcohol (beer, wine, whiskey, etc.) is...

____ (1) extremely harmful

____ (2) harmful

____ (3) somewhat harmful

____ (4) mainly harmless

____ (5) harmless

44. My parents are _____my using marijuana.

____ (1) strongly against

____ (2) moderately against

____ (3) neither against nor in favor of

____ (4) moderately in favor of

____ (5) strongly in favor of

45. My parents are _____ my using alcohol (beer, wine, etc.).

____ (1) strongly against

____ (2) moderately against

____ (3) neither against nor in favor of

____ (4) moderately in favor of

____ (5) strongly in favor of

46. In the last month how much have you smoked tobacco cigarettes?

____ (1) never, I didn't smoke cigarettes.

____ (2) once to a few times, not every day.

____ (3) about 1 or 2 cigarettes a day.

____ (4) about 3 to 6 a day.

____ (5) about 7 to 10 a day (up to half a pack).

____ (6) about 11 to 20 a day (up to a pack).

____ (7) more than a pack (20) a day.

47. In the last month how much tobacco dipping and snuffing have you done?

____ (1) none, don't dip or snuff tobacco

____ (2) once to a few times, not every day

____ (3) about 1 or 2 times a day

____ (4) about 3 to 5 times a day

____ (5) about 6 to 10 times a day

____ (6) more than 10 times a day

48. In the last year have you taken any steroids for physical development or to increase endurance?

____ (1) none, have used no steroids

____ (2) some, have taken a few times

____ (3) regularly, have been on a program of steroid use

For questions 49-51, check all answers that apply.

49. A lot of what I know about alcohol I learned from...

____ (1) my friends

____ (2) my parents

____ (3) school classes or programs

____ (4) own experience

____ (5) brothers or sisters

____ (6) movies, television

50. A lot of what I know about drugs (not alcohol) I learned from...

____ (1) my friends

____ (2) my parents

____ (3) school classes or programs

____ (4) own experience

____ (5) brothers or sisters

____ (6) movies, .elevision

51. Where do most kids at this school who use drugs get them?

____ (1) at home (parents, brothers/sisters)

____ (2) other family members not at home

____ (3) at school (friends)

____ (4) at parties, social events outside school

____ (5) from friends outside of school or parties

____ (6) directly from dealers in the community

____ (7) other, don't know

For questions 52 - 55 continue checking all answers that apply.

52. Why do you think most kids your age use alcohol or other drugs?

____ (1) to get away from their problems

____ (2) to see what it's like

____ (3) because their friends do

____ (4) to have fun

____ (5) bored, nothing else to do

53. Where do most of the kids at this school who use drugs take them?

____ (1) at home

____ (2) at school during the day

____ (3) at school events (games, dances, etc.)

____ (4) at parties, social events out of school

____ (5) with friends outside of school or parties

____ (6) other, don't know

54. A good reason(s) for not using alcohol or other drugs is that you...

____ (1) might become an addict or alcoholic.

____ (2) could get into trouble with the police or school.

____ (3) might lose close friends who do not approve of alcohol or other drug use.

____ (4) would disappoint your parents or other adults who care about you.

____ (5) would disappoint yourself because you have chosen not to drink or use drugs.

55. How has what you learned in school about alcohol or other drugs affected you? (check all answers that apply)

____ (1) never had classes or programs on alcohol or drugs in school

____ (2) learned to avoid or reduce use of beer, wine, or liquor

____ (3) learned to avoid or reduce use of drugs (inhalants, marijuana, cocaine, speed, etc.)

____ (4) helped me resist pressure from my friends to use drugs or drink alcohol

____ (5) learned how alcohol and other drugs can be harmful to my health

____ (6) helped me to understand and deal with my feelings

____ (7) helped me to make and keep good friends

____ (8) helped me talk with my parents and get along better with them

____ (9) became involved in other activities at school, in the community, at church, etc.

____ (10) has not affected me. I have not learned anything

____ (11) had already decided on my own not to use drugs or drink alcohol

56. What kind(s) of involvement in alcohol/drug prevention activities and classes have you had at your school in the last year? (check only one answer)

____ (1) equivalent of a semester course on alcohol/drugs

____ (2) part of a semester course (such as Health) along with other topics

____ (3) participation in student activities in alcohol/drug prevention such as clubs, support groups, campaigns for sobriety, etc.

____ (4) attend assemblies or other events on alcohol/drug use and abuse

____ (5) other

____ (6) none, as far as I know

For questions 57 through 62, in the last year (since January, 1989) have you done any of the following: (put a check in space that best applies)

		Never	Once/ Twice	3-6 Times	More than 6 Times
57.	Cut (not attended) a school class	____	____	____	____
58.	Been suspended or expelled from school	____	____	____	____
59.	Been arrested by police	____	____	____	____
60.	Been placed on probation by a judge	____	____	____	____
61.	Been in trouble at school (sent out of class to principal, assistant principal, assistant principal, counselor)	____	____	____	____
62.	Been absent from school all day without an excuse such as being sick or having doctor's appointment	____	____	____	____

63. In the last year (since January, 1989), have you been active in organized school activities such as athletic teams, clubs, student government, or other organizations?

____ (1) never participated in school activities

____ (2) sometimes participate, but mainly do "my own thing"

____ (3) about as active as most students

____ (4) more active than most students

____ (5) one of the most active in my grade

Answer questions 64 to 71 in terms of how you currently feel or think. (Check only one answer for each question).

64. How important is it for you to finish high school in order to get the kind of job you want?

____ (1) not important at all to finish school

____ (2) somewhat important

____ (3) fairly important

____ (4) very important, essential

65. Do you ever think about quitting school so that you can get a full time job?

____ (1) no, never think about quitting school for work

____ (2) have thought about it once or twice

____ (3) think about it fairly often

____ (4) think about it all of the time

____ (5) definitely intend to quit school and get a job

66. Do you ever think about quitting school so that you can take better care of your family responsibilities?

____ (1) no, never think about quitting school to help family

____ (2) have thought about it once or twice

____ (3) think about it fairly often

____ (4) think about it all of the time

____ (5) definitely intend to quit school and help out family

67. Generally, how interested are you in subjects you have been studying in school this year?

____ (1) bored, not interested at all

____ (2) only occasionally interested

____ (3) about half the classes are interesting

____ (4) most of the classes are interesting

____ (5) almost everything is interesting

68. How hard are you working on school subjects?

____ (1) do hardly any school work

____ (2) do some work, but less than most students

____ (3) do about as much work as most students

____ (4) do more work than most students

____ (5) one of the hardest-working students in my grade

69. Generally, how do you like school?

____ (1) I hate it

____ (2) I don't like it

____ (3) I don't care one way or the other

____ (4) I like it

____ (5) I really like it

70. With whom do you live?

____ (1) one of my parents

____ (2) both of my parents

____ (3) relative

____ (4) foster home

____ (5) other

71. With whom would you <u>like</u> to live?

____ (1) one of my parents

____ (2) both of my parents

____ (3) relative

____ (4) foster home

____ (5) other

Answer questions 72 and 73 for your life up to now.

72. Have any of your best friends, or other students you talk to the most in school, ever gotten into trouble at school or with the police?

____ (1) no, never

____ (2) once

____ (3) two or three times

____ (4) several times

____ (5) always seem to be in trouble

73. Have any of your best friends or students you talk to the most dropped out of school?

____ (1) no, none dropped out

____ (2) one has dropped out

____ (3) two have dropped out

____ (4) three or more have dropped out

74. My average grade in the last year is about ...

A (4.0) ____ B (3.0) ____ C (2.0) ____ D (1.0) ____ F ____

75. My parents completed the following amount of schooling (check for each parent):

	Mother		Father
(1)	____	don't know	____
(2)	____	less than 6th grade	____
(3)	____	6th grade	____
(4)	____	some high school	____
(5)	____	high school grad	____
(6)	____	some college	____
(7)	____	college grad	____
(8)	____	advanced degree (master's, doctorate, etc.)	____

GRADE 7

California Substance Use Survey, Fall 1989

This is a survey of what you know about the use of drugs and alcohol. You are not to give your name or identify yourself in any other way. This survey is voluntary. You do not have to complete this survey, but we hope that you will decide to do so.

If you have decided to participate, please fill in the following information:

Name of your School: _____

Your school grade level (check one): 7th ____ 8th ____

Age (in years) ____ Sex (check one): Male ____(1) Female ____(2)

Which racial or ethnic group do you identify with? (check one only):

___ (1) Black (non-Hispanic)

___ (2) White (non-Hispanic)

___ (3) Native American

Hispanic Groups

___ (4) Mexican/Mexican American

___ (5) Central or South American

___ (6) Other Hispanic

___ (7) Cuban

___ (8) Puerto Rican

Asian and Pacific Islander Groups

___ (9) Chinese

___ (10) Filipino

___ (11) Korean

___ (12) Southeast Asian

___ (13) Asian Indian

___ (14) Japanese

___ (15) Pacific Islander

OTHER:

___ (16) _____ _____

Were you born in this country? (check one) Yes ____(1) No ____ (2)

Copyright, Rodney Skager, 1981, 1985

For questions 1-17, please circle only one answer for each question. Use the following scale:

How often did you use these kinds of substances without a doctor's orders in the last six months?	Never	Once or twice	A Few times	Once a month	Once a week	Once a day	More than once a day
1. beer	1	2	3	4	5	6	7
2. wine (including wine coolers)	1	2	3	4	5	6	7
3. liquor (whiskey, vodka, gin, etc.)	1	2	3	4	5	6	7
4. marijuana (grass, pot, weed, sins, bud, etc.)	1	2	3	4	5	6	7
5. hashish (hash, hash oil, etc.)	1	2	3	4	5	6	7
6. methamphetamines or amphetamines (crank, speed, meth, crystal, bennies, black beauties, Ritalin, ice, etc.)	1	2	3	4	5	6	7
7. cocaine (coke, rock, base, snort, snow, crack, flake)	1	2	3	4	5	6	7
8. LSD (acid, windowpane, blotter)	1	2	3	4	5	6	7
9. mushrooms (fungus, shrooms)	1	2	3	4	5	6	7

	Never	Once or twice	A Few times	Once a month	Once a week	Once a day	More than once a day
10. other psychedelics (mescaline, peyote, MDA, MDMA, ecstasy, adam, EXTC)	1	2	3	4	5	6	7
11. barbiturates (barbs, reds, yellows, Nembutal, Seconal, Amytal)	1	2	3	4	5	6	7
12. sedatives (Quaaludes, ludes, sopers, Doriden)	1	2	3	4	5	6	7
13. tranquilizers (Valium, Librium, Thorazine, Miltown, etc.)	1	2	3	4	5	6	7
14. inhalants (sniffing glue, paint, butane, gasoline, amyl nitrate, rush, poppers)	1	2	3	4	5	6	7
15. PCP (angel dust, juice, wack, sherm, super cool)	1	2	3	4	5	6	7
16. heroin (smack, china white, tar, goma, brown)	1	2	3	4	5	6	7
17. other narcotics (codeine, morphine, opium, Demerol, Percodan)	1	2	3	4	5	6	7

For the rest of the questions, the word "drug" means any of the drugs in (4)-(17) above (not alcohol, steroids, etc.).

18. In the last six months how often did you use more than one substance on the same occasion, for example, beer with marijuana or booze and pills, etc.? Put a check ( ) next to the answer that is closest to your own use.

____ (1) never did/don't use.

____ (2) used more than one substance once or twice.

____ (3) used more than one a few times (3 to 6 occasions).

____ (4) used more than one several times (7 to 10 occasions).

____ (5) used more than one often (more than 10 occasions).

19. Have you ever used freebase, crack, rock, rush, supercoke, or gravel?

____ (1) no, never

____ (2) once or twice

____ (3) 3 to 6 times

____ (4) 7 to 10 times

____ (5) more than 10 times

20. About how old were you the first time you tried alcohol (beer, wine, or hard liquor)?

____ age ____ never did

21. About how old were you the first time you felt high or intoxicated from any kind of alcohol?

____ age ____ never did

22. About how old were you the first time you tried a drug other than alcohol such as marijuana, speed, etc.?

____ age ____ never did

23. About how old were you the first time you got high or loaded from a drug other than alcohol?

____ age ____ never did

For questions 24-27, check only one answer for each question.

24. If you have ever bought any type of alcohol (beer, coolers, etc.) or drugs (marijuana, pills, etc.), where did the money you used come from?

____ (1) never have bought any alcohol or drugs

____ (2) from parents (such as allowance or pay for work at home)

____ (3) from my job outside my home

____ (4) from dealing drugs

____ (5) other

25. Where were you the first time you tried a drug other than alcohol?

____ (1) have never used drugs

____ (2) with friends at a party

____ (3) with friends in a car

____ (4) at a public event (concert, game, dance, etc.)

____ (5) at school during regular school day

____ (6) at home with friends or family member(s)

____ (7) alone (at home or elsewhere)

____ (8) other

26. The first time you used a drug, did you start by drinking any alcohol (beer, wine, liquor, etc.)?

____ (1) have never used drugs

____ (2) no, did not drink alcohol first

____ (3) yes, a little (1 beer, glass of wine or wine cooler, 1 drink)

____ (4) yes, a couple (2 beers, etc.)

____ (5) yes, quite a bit (3 or more beers, etc.)

27. If you have drunk alcohol (beer, coolers, etc.) at home or elsewhere, do you think your parents know about it?

____ (1) I have never used alcohol

____ (2) sure that they do not know

____ (3) think that they do not know

____ (4) not sure whether they know or not

____ (5) think that they do know

____ (6) sure that they do know

For questions 28-31, check only one answer for each question.

28. If you have used a drug other than alcohol at home or elsewhere, do you think your parents know about it?

____ (1) I have never used drugs

____ (2) sure that they do not know

____ (3) think that they do not know

____ (4) not sure whether they know or not

____ (5) think that they do know

____ (6) sure that they do know

29. Have you ever been in a car with friends who were drinking and driving?

____ (1) never

____ (2) once or twice

____ (3) 3 - 6 times

____ (4) more than 6 times

30. How difficult is it for kids in your grade level to get marijuana or some other drug if they really want it?

____ (1) very difficult

____ (2) fairly difficult

____ (3) fairly easy

____ (4) very easy

____ (5) don't know

31. Have you every been high at school on alcohol or a drug like marijuana, pills, speed, etc.?

____ (1) never

____ (2) once or twice

____ (3) 3 - 6 times

____ (4) more than 6 times

For questions 32-35, please place a check mark in the space next to the answer that best fits your own experience or opinion. Check only one answer for each question.

32. As far as using alcohol (beer, wine, liquor) is concerned, most of my best friends have...

____ (1) already tried it.

____ (2) have not tried it yet, but probably would like to.

____ (3) are not sure whether they should try it or not.

____ (4) probably will never want to drink alcohol.

____ (5) I don't know

33. With drugs like marijuana (grass, pot, weed), most of my best friends have...

____ (1) already tried one or more drugs.

____ (2) have not tried drugs, but probably would like to.

____ (3) are not sure whether they should try drugs or not.

____ (4) probably will never want to use drugs.

____ (5) I don't know.

34. I think frequent (daily or almost daily) use of marijuana is...

____ (1) extremely harmful.

____ (2) harmful.

____ (3) somewhat harmful.

____ (4) mainly harmless.

____ (5) harmless.

35. In my opinion, frequent (daily or almost daily) use of alcohol (beer, wine, whiskey, etc.) is...

____ (1) extremely harmful.

____ (2) harmful.

____ (3) somewhat harmful.

____ (4) mainly harmless.

____ (5) harmless.

For questions 36-39, please place a check mark in the space next to the answer that best fits your own experience or opinion. Check only one answer for each question.

36. My parents are ____ my using marijuana.

____ (1) strongly against

____ (2) moderately against

____ (3) neither against nor in favor of

____ (4) moderately in favor of

____ (5) strongly in favor of

37. My parents are ____ my using alcohol (beer, wine, etc.)

____ (1) strongly against

____ (2) moderately against

____ (3) neither against nor in favor of

____ (4) moderately in favor of

____ (5) strongly in favor of

38. In the last month how much have you smoked tobacco cigarettes?

____ (1) never, I didn't smoke cigarettes.

____ (2) once to a few times, not every day.

____ (3) about 1 or 2 cigarettes a day.

____ (4) about 3 to 6 a day.

____ (5) about 7 to 10 a day (up to half a pack).

____ (6) about 11 to 20 a day (up to a pack).

____ (7) more than a pack (20) a day.

39. In the last month how much tobacco dipping and snuffing have you done?

____ (1) none, don't dip or snuff tobacco

____ (2) once to a few times, not every day

____ (3) about 1 or 2 times a day

____ (4) about 3 to 5 times a day

____ (5) about 6 to 10 times a day

____ (6) more than 10 times a day

For questions 40-44 check all answers that you agree with or that apply.

40. Where do most kids at this school who use drugs get them?

_____ (1) at home (parents, brothers/sisters)

_____ (2) at school (friends, dealers).

_____ (3) at parties, social events outside school.

_____ (4) from friends outside of school or parties.

_____ (5) directly from dealers outside school.

_____ (6) other, don't know.

41. A good reason(s) for not using alcohol or other drugs is that you...

_____ (1) might become an addict or alcoholic.

_____ (2) could get into trouble with the police or school.

_____ (3) might lose close friends who do not like alcohol or drugs.

_____ (4) your parents or other adults who care about you would be angry or sad.

_____ (5) would not be the kind of person you want to be.

42. A lot of what I know about alcohol I learned from...

_____ (1) my friends

_____ (2) my parents

_____ (3) school classes or programs

_____ (4) own experience

_____ (5) brothers or sisters

_____ (6) movies, television

43. A lot of what I know about drugs I learn from...

_____ (1) my friends

_____ (2) my parents

_____ (3) school classes or programs

_____ (4) own experience

_____ (5) brothers or sisters

_____ (6) movies, television

44. Things I learned about alcohol and drugs in school classes or meetings are...

____ (1) never had classes or programs on alcohol or drugs in school

____ (2) what drugs do to people; different kinds of drugs.

____ (3) how to say "no" to kids who want me to drink or use drugs.

____ (4) how drugs and alcohol hurt your body.

____ (5) how to make good decisions in life; what kind of person you want to be.

____ (6) other things to do besides drugs or alcohol.

____ (7) other